QUESTION IV OF THE CREATION OF FORMLESS MATTER

THERE are two points of inquiry: (1) Whether the creation of formless matter preceded in duration that of things? (2) Whether matter was informed all at once or by little and little?

Q. IV: ARTICLE I

Did the Creation of Formless Matter Precede in Duration the Creation of Things?

[Sum. Th. I, Q. lxvi, A. i; QQ lxvii, lxix]

THE first point of inquiry is whether the creation of formless matter preceded in duration the creation of things: and it Would seem that it did not.

- 1. Augustine says (Gen. ad lit. xv) that formless preceded informed matter as the voice precedes the song. Now the voice precedes the song not in duration but only in nature. Therefore formless matter precedes informed things not in duration but only in nature.
- 2. It might be said that Augustine is speaking of matter with regard to the formation that results from the elemental forms which were in matter from the very beginning.—On the contrary, as water and earth are elements, so also are fire and air. Now Scripture in referring to the formless state of matter mentions earth and water. Consequently if matter from the beginning had the forms of the elemental forms which were in matte from the very beginning.—On the contrary, as water and earth are elements, so also are fire and air. Now Scripture in referring to the formless state of matter mentions earth and water. Consequently if matter from the beginning had the forms of the elements, Scripture would also have mentioned fire and air.
- 3. The substantial form together with matter aree thee cause of the accidental qualities according to the Philosopher (Phys. i). Now the active and passive qualities are the accidental properties of the elements. Hence, if substantial forms were in matter from the beginning, it follows that the active and passive qualities were there also, so that there was no formlessness there apparently.
- 4. But it will be said that there was formlessness or confusion as regards the position of the elements.—On the contrary according to the Philosopher (De Coelo et Mundo, iv, text. 25) every element has a place corresponding to its form: for the elements occupy their respective places by virtue of their respective forms. Hence if from the beginning matter

had substantial forms, it follows that each element was in its proper place, so that there was no confusion of elements in respect of which matter could be called formless.

- 5. If matter be called formless for no other reason but that the elements had not yet their proper and natural place, it would seem to follow that matter is said to be informed by the fact that the elements were allotted their natural positions. But this is not verified in the work of distinction, where certain waters are placed above the heavens, whereas water's natural place is beneath the air and immediately above the earth (De Coelo et Mundo iv). Therefore the formless state of matter was not owing to the aforesaid confusion of place.
- 6. It will be said perhaps that the waters are stated to be above the heavens in so far as they are raised above them by evaporation.—On the contrary as philosophers prove, the vaporised waters cannot be raised above the entire atmosphere, in fact they do not rise more than half way: and consequently much less can they rise above fire and yet further above the heavens.
- 7. The, formless state of matter is expressed in the words (Gen. i, 2), The earth was void and empty. Now matter is said to be void in respect of the power of production, and to be empty in respect of adornment, according to the explanation of holy men, so that the text refers to the things that move on the face of the earth. Consequently the formless condition of matter does not refer to place, nor did it precede in duration the formation of matter.
- 8. He who can give all at once is less liberal if he give by degrees, wherefore it is written (Prov. iii, 28): Say not to thy friend: Go and come again, and tomorrow I will give to thee. Now God was able to give perfect being to things at once. Hence since he is supremely liberal he did not make matter formless before giving it a form.
- 9. Movement from centre to centre results from the elements occupying their natural position. Now the formless state of matter gives evidence that there was movement from centre to centre, because the vaporised waters as we are told arose above the earth. Therefore the elements had already their natural positions.

- 10. Rarity and density are the causes of things being heavy and light (Phys. iv). Now rarity and density were already in the elements, for we are told that the waters were more rarefied than now. Therefore things were heavy or light, and the elements had their respective positions which belong to them according as they are heavy or light.
- 11. In this formless condition of things it is clear that the earth had its position, and we are given to understand that it was covered with the waters when we read (Gen. i, 9): Let the waters that are under the heaven be gathered together into one place, and let the dry land appear. Therefore the other elements likewise had their respective positions so that there was no formlessness in matter.
- 12. From a perfect agent issues a perfect effect, since every agent produces its like. Now God is the most perfect agent. Therefore from the very first he produced perfect matter, which consequently was formed since the form is the perfection of matter.
- 13. If formless matter preceded the formation of things in duration, matter existing in that condition either was entirely devoid of form, or it had some kind of form. If it was altogether without form it was only potential and not actual, and consequently it was not yet created, since existence is the term of creation. If, on the other hand, it had some kind of form, this was either an elemental form, or the form of a mixed body. If it was an elemental form, it had either one form or several. If several, there was already diversity on account of the divers elemental forms. If one only, it follows that one particular elemental form naturally precedes the others in matter, and thus one element would be the origin of the others. This was the theory of the early physicists who held that there is only one element, and this is refuted by the Philosopher (De Gener. et Corrup. ii). And if it had the form of a mixed body, it follows that the form of a compound naturally precedes the elemental forms in matter: and this is clearly false, because a compound is made by something that sets the elements in motion so as to produce the form of the compound. Therefore it is impossible that matter was at first formless and afterwards formed.
- 14. It will be said perhaps that matter had the elemental forms but not in the same way as now, since the waters were more rarefied, and in the form of vapour, mixed with the air.— On the contrary, each elemental form requires a particular measure of rarity or density that is essential to it. Now the rarity which enables a thing to rise into the air surpasses the condition of water which is naturally heavier than air. Consequently if the waters were so rarefied that in the shape of vapour they rose into the air, they no longer retained the

nature of water: and thus the elemental forms were not in matter, whereas we have stated the contrary to be the case.

- 15. The various kinds of things were formed from formless matter during the works of the six days. Now among the works of the six days the firmament was formed on the second day. Hence, if formless matter was subject to the elemental forms it would follow that the heavens were made from the four elements, and this is refuted by the Philosopher (De Coelo et Mundo i).
- 16. The natural body is compared to its shape as matter to its form. Now a natural body cannot be without a shape. Therefore matter cannot be without a form.
- 17. If matter was without a form when it was first created, the gathering of the waters which took place on the third day would never have been. But this would seem impossible: because if the waters covered the earth on all sides, there was no place into which they could be gathered together. Hence seemingly formless matter did not precede the formation of things,. That the waters covered the earth on all sides is apparent from the fact that the elements were separate (De Coelo et Mundo iii, text. 56).
- 18. It will be said perhaps that there were hollow places under the surface of the earth into which the waters subsided, so that the earth provided a place for the waters to congregate.—On the contrary such hollows or caverns in the earth are caused by rocks upholding the surface and preventing it from subsiding: and this could not apply to the case in point since rocks are compounded of the elements, and it would follow that mixed bodies existed before the formation of the elements. Therefore such cavernous places were impossible.
- 19. If there were such hollow places in the earth they could not be empty: and so they would be full of air or water: and this would seem to be impossible since it is contrary to the nature of either to be underneath the earth.
- 20. The water that covered the earth on all sides was either in its natural place or not. If it was, it could not be removed thence except by violence, since otherwise than by force a body is not moved from where it rests naturally. But this is not in keeping with the original

institution of things whereby nature was established, since nature is incompatible with violence. On the other hand, if this position of the water was violent, the water could by its nature return to the disposition which it lacked, since a thing returns naturally from a place in which it is situated by force. Consequently the gathering together of the waters into one place should not be ascribed to the work of formation.

- 21. Things were created in accordance with their natural order. Now distinction is naturally prior to confusion, thus a simple thing is naturally prior to a compound. Hence it was not fitting to the institution of things that they should be at first in a state of confusion and afterwards be made distinct.
- 22. A process from actuality to potentiality is more suitable to the corruption of things than to their institution: because things are made by becoming actual from being potential. Now to proceed from compound things to the elements, is to proceed from the actual to the potential, since the elements are as matter in relation to the form of the compound. Therefore it was not suitable to the institution of things that they should first of all be in a state of confusion and composition, and afterwards be made distinct.
- 23. This would seem to savour of the errors of the ancient philosophers: namely of Empedocles who held that the parts of the world were divided from one another by repulsion whereas previously they had been united by attraction: and of Anaxagoras who held that at first aU things formed one mass, and that afterwards the mind began to make distinctions by analysing this confused and composite mass. These opinions have been sufficiently refuted by later philosophers.—Therefore we must not hold that by a priority of duration matter was in a formless and confused state before its information.
- 1. On the contrary Gregory (Moral. xxxii) commenting on Ecclus. xviii, 1: He that liveth for ever created all things together, says that all things were created together in their substantial matter but not in their specific form: and this would not be unless the substantial matter existed before receiving specific forms. Therefore formless matter preceded the formation of things in point of duration.
- 2. Again, that which is not cannot exercise an operation. Now formless matter exercises an operation, since it is appetent of a form (Phys. iii). Therefore matter can be without a form,

and thus it is not unreasonable to suppose that formless matter preceded the formation of things in point of duration.

- 3. Again, God can do more than nature. Now nature makes a potential thing to be actual. Therefore God can make that which is a being simply to be potential: and thus he could make matter without a form.
- 4. Again, we must not deny the existence of what Scripture declares to have been: for as Augustine says (De Trin. v), no Christian contradicts the statements of Holy Writ. Now the divine Scriptures assert that at one, time the earth was void and empty. Therefore we must not deny this. And in whatever sense the words be explained they imply that matter was formless. Therefore at some time the substance of matter was in existence before its formation, otherwise it would never have been formless.
- 5. Again, we have shown (A. 18) that spiritual and corporeal creatures were made at the same time. Now the formless state in the spiritual creature preceded its formation in point of duration. Therefore the same is to be said of the corporeal creature. The minor premise is proved as follows. The formation of the spiritual creature denotes its conversion to the Word whereby it was enlightened. And as soon as light was made light was divided from darkness, which in the spiritual creature denotes sin. But there could be no sin in the angels in the first instant of their creation, because in that case the demons would never have been good angels. Therefore the spiritual creature was not formed in the first instant of its creation.
- 6. Again, the material of which a thing is made precedes even in time that which is made from it. Now God created the earth from invisible matter (Gen. i, 21) which according to Augustine (Super Gen. i, 15) was formless matter. Therefore formless matter preceded the formation of the earth. The major premise is proved thus. According to the Philosopher (Phys. i) things are said to be made in two ways. First thus: if I say: "This is made so and so per se" which belongs to a subject, for example, "a man is made white"; or, "This is made so and so accidentally" namely from a privation or contrary, for example "A not-white or a black thing is made white." Secondly, as when I say "This is made from so and so": this does not refer to the subject except by reason of a privation. For we do not say that a white man is made from a man, but that a white thing is made from a not-white or a black thing, or from a black or not-white man. Accordingly that from which a thing is made is either a privation or contrary, or it is matter subject to privation or contrary. And in either

case that from which a thing is made must precede in point of time, since contraries cannot be in the same subject together, nor can matter be subject at the same time to privation and form. Therefore that from which a thing is made precedes in time that which is made from it.

7. Further, the action of nature as far as possible imitates the action of God even as the action of a second cause imitates that of the first cause. Now the process of nature's action is from the imperfect to the perfect. Therefore God also at first in order of time produced something imperfect and afterwards perfected it, and thus formless matter preceded its formation.

8. Again, Augustine says that when Scripture mentions earth and water in the words of Genesis (i, 2), The earth was void and empty, and the spirit of God moved over the waters, the sense is not that they were already earth and water, but that they could be. Hence primary matter at one time had not as yet the nature of earth and water, but was able to have it: and consequently matter without a form preceded its formation. I answer that as Augustine says (Conf. xii) this question admits of a twofold discussion, one regards the true answer to the question itself, the other regards the sense of the text in which Moses inspired by God tells the story of the world's beginning.

As to the first discussion two things are to be avoided one is the making of false statements especially such as are contrary to revealed truth, the other is the assertion that what we think to be true is an article of faith, for as Augustine says (Confess. x), when a man thinks his false opinions to be the teaching of godliness, and dares obstinately to dogmatise about matters of which he is ignorant, he becomes a stumbling block to others. The reason why he says that such an one is a stumbling block is because the faith is made ridiculous to the unbeliever when a simple-minded believer asserts as an article of faith that which is demonstrably false, as again Augustine says in his commentary (Gen. ad lit. i). As regards the other discussion two things also are to be avoided. One is to give to the words of Scripture an interpretation manifestly false: since falsehood cannot underlie the divine Scriptures which we have received from the Holy Spirit, as neither can there be error in the faith that is taught by the Scriptures. The other is not to force such an interpretation on Scripture as to exclude any other interpretations that are actually or possibly true: since it, is part of the dignity of Holy Writ that under the one literal sense many others are contained. It is thus that the sacred text not only adapts itself to man's various intelligence, so that each one marvels to find his thoughts expressed in the words of Holy Writ; but also is all the more easily defended against unbelievers in that when one finds his own

interpretation of Scripture to be false he can fall back upon some other. Hence it is not inconceivable that Moses and the other authors of the Holy Books were given to know the various truths that men would discover in the text, and that they expressed them under one literary style, so that each truth is the sense intended by the author. And then even if commentators adapt certain truths to the sacred text that were not understood by the author, without doubt the Holy Spirit understood them, since he is the principal author of Holy Scripture. Consequently every truth that can be adapted to the sacred text without prejudice to the literal sense, is the sense of Holy Scripture.

Having laid down these principles we must observe that commentators have given to the opening chapter of Genesis various explanations, none of which is contrary to revealed truth: and as far as concerns the question in point they may be divided into two groups in respect of their twofold interpretation of the formless state of matter indicated at the beginning of Genesis by the words, The earth was void and empty. Some understood these words to mean that matter was formless in the sense that it actually had no form but that all forms were in it potentially. Now matter of this kind cannot exist in nature unless it receive formation from some form: since whatever exists in nature exists actually, and actual existence comes to a thing from its form which is its act, so that nature does not contain a thing without a form. Moreover, since nothing can be included in a genus that is not contained specifically in some division of the genus, matter cannot be a being unless it be determined to some specific mode of being, and this cannot be without a form. Consequently if formless matter be understood in this sense it could not possibly precede its formation in point of duration, but only by priority of nature, inasmuch as that from which something is made naturally precedes that which is made from it, even as night was created first. This was the view taken by Augustine. Others took the view that the formless state of matter does not denote absence of all form in matter, but the absence of natural finish and comeliness: in which sense it is quite possible that matter was in a formless state before it was formed. This would seem in keeping with the wise ordering of its Maker who in producing things out of nothing did not at once bring them from nothingness to the ultimate perfection of their nature, but at first gave them a kind of imperfect being, and afterwards perfected them: thus showing not only that they received their being from God so as to refute those who assert that matter is uncreated; but also that they derive their perfection from him, so as to refute those who ascribe the formation of this lower world to other causes. Such was the view of Basil the Great, Gregory and others who followed them. Since, however, neither opinion is in conflict with revealed truth, and since both are compatible with the context, while admitting that either may be held, we must now deal with the arguments advanced on both sides.

Reply to the First Objection. Augustine is speaking of formless matter as devoid of all form, in which case we must needs say that its formless state preceded its formation by priority of nature alone. In the next Article we shall state his view on the order of the formation.

Reply to the Second Objection. There are several opinions on this point. Philo is said to have understood that the Book of Genesis in mentioning the number and order of the elements speaks of earth and water in the strict sense. The waters are indicated as being above the earth, since it is written (i, 9): Let the waters be gathered together into their own place, and let the dry land appear. Above these two he places the air as being mentioned in the words: The Spirit of the Lord moved over the waters, where he takes spirit to denote the air: and takes the heaven to mean fire; because it is located above all the others. Seeing however that Aristotle proved (De Coelo i) that the heavens cannot be made of fire, as indicated by their circular movement, Rabbi Moses agrees with Aristotle, and while adopting Philo's view as to the three first elements, contended that fire is denoted by the darkness, because in its own sphere fire does not give light: and he holds that the situation of fire is indicated in the words: Upon the face of the deep. He holds also that by the heavens we are to understand the Fifth Essence.

As Basil, however (Hom. ii, in Hexam.), observes that Scripture is not wont to signify the air by the Spirit of the Lord, and that by mentioning the extremes it implies the intermediate elements: and with reason inasmuch as it is evident to the senses that 'water and earth are bodies, whereas air and fire are not so intelligible to unlettered minds such as those for whose instructions the Scriptures were given.

According to Augustine (Dial. lxv, qu. 21) the earth and water mentioned before the formation of fight, do not denote the completely formed elements, but formless matter void of all species. Moreover the formless state of matter is signified by these two elements rather than the others, because they are more akin to a formless state as having more matter and less form, and again because they are better known to us and indicate to us more clearly the matter of the other elements. Also formless matter is signified by two rather than by one element only, lest if one only were mentioned we might be led to think that this one alone was formless matter.

Reply to the Third Objection. In the opinion of Basil and other holy men the formless state of things in the beginning did not imply that the elements lacked their natural qualities: since each had its respective forms both substantial and accidental.

Reply to the Fourth Objection. The situation of the elements may be considered in two ways. First as regards their respective natures: and in this way fire naturally contains air, air water, and water earth. Secondly, as regards the necessity of generation which belongs to the middle place: and thus it is necessary that the surface of the earth be partly covered by water, so as to favour the generation and preservation of mixed bodies, especially of perfect animals which require air for breathing. We must reply, then, that this primordial formless state did not affect the situation natural to the elements considered in themselves (for all the elements had it) but the situation that was competent to them in respect of the generation of mixed bodies. This situation was not perfect as yet, seeing that mixed bodies had not yet been produced.

Reply to the Fifth Objection. With regard to the waters that are above the heavens there have been various opinions. Origen is credited with the view that they denote spiritual natures. But this cannot be reconciled with the text, since it is not competent to the nature of a spiritual being to occupy a situation, as though the firmament intervened between them and the lower corporeal waters, according to the text (i, 6). Hence others hold that the firmament signifies the neighbouring airy sky above which the waters are raised by evaporation and become rain-clouds: and then the airy heaven stands between the higher vaporised waters that float in the space of the mid-air, and the aqueous body which is seen to be situated on the earth. Rabbi Moses, agrees with this explanation, which nevertheless would seem to be incompatible with the context: since the text goes on to say (verses 16, 17) that God made two great lights and the stars, and that he set them in the firmament of the heaven. Consequently others maintain that the firmament signifies the starry heaven, and that the waters situated above the heavens are of the same nature as the elemental waters, but that they are set there by divine providence in order to temper the power of the fire of which they held the entire heaven to consist, according to Basil. In support of this view some according to Augustine (Gen. ad lit. ii, 4, 5) advanced two arguments. One was that since water by means of evaporation can rise into mid-air where the rains are produced, if it be yet more rarefied and divided into yet smaller particles (for it is indefinitely divisible like all continuous bodies) it will be able by reason of its rarefaction to rise above the starry heaven, and remain there in a position becoming to its nature. The other argument is that in the star Saturn, whose heat must be extreme on account of the rapidity of its movement by reason of the length of its orbit, the effects of cold are observed, and they pretend that this is occasioned by the neighbourhood of the water which has a cooling effect on this star.

But this explanation we consider to be defective in that it ascribes to the Scriptures statements that are proved evidently to be false.—First, as regards position, for it would seem to upset the natural situation of bodies. Because since a body should occupy a higher position according as it is more formal, it would seem inconsistent with the nature of things that water, which is the most material of all bodies with the exception of earth, should be set even above the starry heaven. Moreover it would seem out of keeping that things of the same species should be allotted different natural places, which would be the case if the element of water were partly immediately above the earth and p~rtly above the heavens. Nor is it enough to reply that God by his omnipotence upholds those waters against their nature, above the heavens, since we are discussing the nature that God gave to things, and not the miracles that he may have been pleased to work in them; as Augustine says (ibid. ii, i). —Secondly, the argument about rarefaction and divisibility of the waters is altogether futile. For though mathematical bodies are indefinitely divisitle, natural bodies have a fixed term to their divisibility, since every form demands a certain quantity even as other accidents in accordance with its nature. Hence neither can rarefaction of water continue indefinitely, but it reaches a, fixed term which is the rarity of fire. Moreover, water might continue to be rarefied until it was no longer water, but air or fire, if the bounds of water's rarity were exceeded. Nor would it be possible for water naturally to rise above the positions of air and fire, unless it lost the nature of water so as to surpass their rarity. Nor again would it be possible for an elemental body which is corruptible to become more formal than the heavens which are incorruptible, and thus be set above them naturally. Thirdly, the second argument is utterly trivial. Heavenly bodies as philosophers show are not susceptible to impressions from foreign bodies. And it was impossible for Saturn to be cooled by those waters, without the stars of the eighth sphere being affected by them in the same way: whereas many of these stars are observed to have a heating influence.

Wherefore one would prefer to offer an explanation which would leave the text of Scripture unassailable, by suggesting that those waters are not of the same nature as our elemental water, but are of the, nature of the Fifth Essence, being transparent like the waters here below, even as the empyrean shines like our fire. Some call them crystalline, not that they are frozen into the form of crystals, since according to Basil (Hom. iii in Hexam.) only a silly child or an imbecile

could imagine such things about the heavens: but on account of their solidity, even as it is written about all the heavens (Job xxxvii, 18) that they are strong as though they were made of molten brass. This heaven according to astronomers is the ninth sphere. Hence Augustine does not adopt any of these explanations but dismisses them as doubtful; thus

he says (ibid. 5): Howsoever these waters may be there and of what kind they may be, one thing is certain, they are there. Surely the written Word has greater authority than the combined genius of men.

The Sixth Objection we grant.

Reply to the Seventh Objection. If according to the exposition of Basil (Hom. iv in HexTm.) and his followers we take the earth to signify the element of earth, we may consider it first as the principle from which certain things originate, plants for instance, of which it is the mother so to speak (De Veget.) so that in their respect it was void before it produced them, since we say that a thing is void or vain if it fail to attain its proper effect or end. Secondly, we may consider it as the abode and place of animals, in respect of which it is described as empty.—Or, according to the text of the Septuagint which reads invisible and incomposite part of the earth was invisible through being covered with water, as also because light was not yet produced so as to render it visible; while it was incomposite because there were as yet no plants and animals to adorn it, nor was it as yet a fit place for their generation and conservation. If, however, the earth signifies primary matter, as Augustine maintains (Dial. lxv, qu. 21), then it is said to be void in comparison with the composite body in which it subsists, because a void is opposite to firmness and solidity; while it is described as being empty in comparison with the forms which were lacking to its potentiality. Hence Plato (Tim.) compares the receptivity of matter to place, inasmuch as place received that which is located therein: and empty and full are terms which are properly applied to a place. Again matter considered in its formless condition is described as invisible, inasmuch as it lacks form which is the principle of all knowledge; and incomposite since it only subsists in a, composite state.

Reply to the Eighth Objection. It pertains to the liberality of a giver not only that he give quickly, but also that he give ordinately and each gift at a suitable time. Hence when the text continues, When thou canst give at present, we must understand the possibility not only of giving absolutely, but also of giving most suitably. Wherefore, in order to observe a suitable order God gave his creatures at first an imperfect state, so that by degrees they might proceed from nothingness to perfection.

Reply to the Ninth Objection. As we have already stated the situation connatural to the elements was in the elements: hence the objection does not avail against this opinion.

The same answer applies to the Tenth and Eleventh Objections.

Reply to the Twelfth Objection. A perfect agent produces a perfect effect: but this effect need not be simply perfect from the very beginning as regards its nature, and it will suffice if it be perfect in keeping with that stage of its existence: even so a child may be described as perfect immediately after its birth.

Reply to the Thirteenth Objection. According to the view that we are defending for the nonce matter is not said to be formless as though it were devoid of all form; or as though it had but one form—either with a potentiality to, all forms, as the ancient physicists maintained who asserted that there was only one primary element;—or virtually containing many other forms, as happens in mixed bodies. The various elemental forms were in various parts of matter, which nevertheless was said to be formless, because it had not as yet received the forms of mixed. bodies, to which forms the forms of the, elements were in potentiality: and because the elements were not as yet suitably placed for the production of such bodies, as we have already stated.

Reply to the Fourteenth Objection. Nothing, not even the authority of the book of Genesis or any argument of reason, binds us to say that at the beginning the elemental forms were not in matter in the same way as they are now: although possibly vapours arose from the waters, as happens now, and then perhaps in greater volume seeing that the earth was wholly covered by the waters.

Reply to the Fifteenth Objection. There are several opinions about the firmament which was created on the second day.

Some hold that this firmament, is not distinct from the heaven which is stated to have been made on the first day: and they contend that Scripture at first announces the works collectively, and afterwards explains how they were done in the course of the six days. This is the view expressed by Basil in his Hexaemeron.

Others maintain that the firmament created on the second day is distinct from the heaven stated to have been made on the first, and this view admits of a threefold explanation.— Some asserted that the heaven created on the first day signifies the spiritual creature whether formed or still unformed, and that the firmament fashioned on the second day is the corporeal heaven that we see. This is the opinion of Augustine (Gen. ad lit. i, 9: Confess. xii).—Others contend that the heaven created on the first day is the empyrean, and that the firmament created on the second day is the starry heaven visible to us. This is the view of Strabo (Gloss. Ord. in Gen. i).—Others maintain that the heaven made on the first day is the starry heaven, and that the firmament made on the second day signifies the region of the air in the neighbourhood of the earth, and separating waters from waters, as stated above. Augustine alludes to this opinion (Gen. ad lit. ii, i) which is that of Rabbi Moses. If this last explanation be adopted it is easy to solve the difficulty: because the firmament made on the second day has not the nature of the fifth essence, so that, as regards the firmament, there is no reason why in its production there should not have been a process from formlessness to formation, whether in respect of rarefaction through the rising vapours being diminished by the gathering, together of the waters, or in respect of its position through the air taking the place of the receding waters. On the other hand in the case of the first three opinions which hold the firmament to denote the starry heaven, there is no need to ascribe to the heaven a process from formlessness to formation, as though it acquired a new form, since Scripture does not bind us to ascribe such a process to the lower elements. But we must understand that the firmament was endowed with a power in respect of the generation of mixed bodies and that its formation consisted in this: even as we have already said about the formation of the lower elements in relation to the generation of mixed bodies (ad 4, ad 13): since as the lower elements are the matter from which mixed bodies are formed, so the firmament is the active cause of mixed bodies. Hence we may take the division of the lower from the higher waters to be like that of two extremes which are distinguished from each other by a mean that has some affinity with both. Thus the lower waters are subject to change inasmuch as through the movement of the firmament they become the matter of mixture, whereas the higher waters are not. According to the opinion of Augustine (Super Gen. ii, li) if we suppose formless matter to have preceded its formation in point of time, there is no great difficulty, since we must ascribe some kind of matter to a heavenly body, seeing that the latter also has movement. Hence there is nothing to prevent such matter preceding its formation by priority of nature, although no kind of formation accrued to it from time. Nor are we therefore bound to say that the heavenly body and the lower elements have one nature in common, although they have a common name, earth or water for instance, in the opinion of Augustine: because this unity is not one of substance but of proportion in so far as any matter is considered from the viewpoint of its potentiality to its form.

Reply to the Sixteenth Objection. This is clear from what has already been said, since the formless condition of matter does not imply that it is devoid of all form but is to be taken as already explained.

Reply to the Seventeenth Objection. The opinion of Augustine (Dial. iv, qu. 21) who held that the earth and water previously mentioned signify not the elements but primary matter is not incompatible with the gathering together of the waters. Thus he says himself (Gen. ad lit. ii, 7, 8) that as the words Let a firmament be made indicate the formation of the heavenly bodies on the second day, so the words Let the waters be gathered together signify the formation of the lower elements on the third day. Hence as the words Let the waters be gathered together mean that the water received its form, so the words Let the dry land appear denote the same with regard to the earth. The reason for these words being used in the formation of these elements instead of words significant of making, e.g. "Let water" or "earth be made"—as when the heaven was mentioned, e.g.—Let a firmament be made, was in order to indicate the imperfection of their forms and their affinity to formless matter. The expression gathered together is used in connection with water to denote its mobility; and the word appear in connection with the earth to signify its stability. Hence Augustine says (Gen. ad lit. ii, ii): "Of the waters it is said 'Let them be gathered together, and of the earth 'Let it appear,' because water glides and flows away, whereas the earth abides."

If, however, we adopt the view of Basil and other holy men who said that in both cases the same earth is signified, and likewise the same water but differently disposed before and after, several replies are suggested. Some said that part of the earth was not under water, and that the waters which covered the inhabitable parts were by God's command gathered together thither. This is disproved from the text itself by Augustine (Super Genes. 1, 12) who says: "If part of the earth was bare whither the waters could be gathered together, then the dry land appeared already and this is contrary to the context." Hence others said that the waters were rarefied and nebulous and afterwards condensed and gathered into a smaller place. But this involves no less a difficulty, both because they were not real waters if they had the form of vapour, and because they would have occupied a place in the air, and the difficulty remains to find a place for the air. Consequently others say that there were hollow places in the earth which by God's operation could receive the multitude of waters. But against this would seem to be the fact that it is accidental if one part of the earth be further than another from the centre: whereas in this formation of things they received their natural shape, as Augustine says (Super. Genes, vi, 6). Wherefore it would seem better to hold with Basil (Hom. iv, in Hexaem.) that the waters were distributed over various parts of the earth and afterwards gathered together, an, explanation which would

seem to be warranted by the text making use of this expression: for even if the waters covered the whole earth, they would not need to be everywhere as deep as they are now in' some parts.

Reply to the Eighteenth Objection. Seeing that mineral bodies do not show any evident superiority of excellence over the elements as living bodies do, they are not described as having been formed apart from the elements, and we understand them to have been produced at the same time as the elements. Hence nothing prevents the existence of hollow places before the waters were gathered together, so that the earth could afterwards provide room for the waters to be gathered together in the depressions of its surface. However, the words used by Augustine in his allusion to this view (Gen. ad lit. i, 12) seem to mean that these hollow places did not already exist beneath the surface, but that they were formed on the surface of the earth when the waters were gathered together. These in fact are his words: "By subsiding in all directions the earth was able to provide these hollow places into which the waters flowing and rushing together were received, and the dry land appeared in those parts that the waters had abandoned." The same view is expressed by Basil (Hom. iv, in Hexaem.): "When the waters were commanded to gather together, a place for their gathering was at once formed, so that by God's command sufficient place was provided to receive the confluence of the many waters." It may be that sufficient place was made by the depressions in the earth's surface, even as certain parts are accidentally higher as hills and mountains.

Reply to the Nineteenth Objection. If the hollow places did not already exist in accordance with what we have said in the last reply, this objection is to no purpose. If, however, they were already in existence we reply that altogether it is unnatural for water or air to be situated beneath the earth if this be left to itself, it is not so if the earth be hindered somewhat in its movement. Thus in caverns beneath the earth we find that the earth is supported by pillars which arise through the air from the floor, since nature abhors a vacuum. But if it be contended that the shallow waters spread over the whole surface of the earth were subsequently gathered together into greater depths, as stated above, these objections will fall to the ground.

Reply to the Twentieth Objection. If we consider the situation natural to the elements and befitting their nature absolutely, then it is natural for water to cover the whole earth on all sides just as it is natural for the air to cover the waters. But if we consider the elements in relation to the generation of mixed bodies, in which the heavenly bodies also take an active part, then their natural situation is that which was given to them afterwards. Hence

as soon as the dry land appeared in some part of the earth we are told at once that the, plants were produced. That the heavenly bodies should exercise an active influence on the elements is not contrary to nature, as the Commentator says (De Coel. et Mund. iii): thus the ebb and flow of the sea, although it is.not the natural movement of water as a heavy body, since it is not towards the centre, nevertheless is natural to water as moved by a heavenly body instrumentally. Much more truly may this be said of the divine action on the elements whose whole nature subsists thereby. As regards the point at issue both these actions would seem to concur in the gathering together of the waters, the divine action principally, and that of the heavenly body in a subordinate degree. Hence immediately after the formation of the firmament the text refers to the gathering of the waters together. Moreover the very nature of water furnishes us with a likely explanation. In the elements the container is more formal than the content, according to the Philosopher (Phys. viii); hence water fails to be a perfect container of the earth in so far as it is not so perfectly formal, as fire and air, being more akin to the density of the earth than to the rarity of fire.

Reply to the Twenty-first Objection. The state of confusion ascribed to the world in its beginning, did not consist in a mingling of the elements, but was by way of contrast with the present state of things, the various parts of the world being distinct from one another and favourable to the generation and preservation of living beings.

This suffices for the Replies to the Twenty-second and Twenty-third Objections.

We must now deal with the arguments on the other side which support Augustine's view.

- 1. Gregory's words express the view that we have already upheld. They do not mean, however, that when things were first created the matter of all things was made devoid of all specific forms, but without certain forms, namely those of living things, and without 'the order requisite for their generation, as we have explained above (ad 4, ad 13).
- 2. Appetence of form is not an act of matter but a certain relationship in matter in respect of a form, in so far as matter has the form potentially, as the Commentator states (Phys. i, 81).

- 3. Were God to make a mere potential being he would do less than nature which makes actual beings. The perfection of all actions depends on the term to which it tends rather than that from which it originates. Moreover the very argument involves a contradiction, namely that anything be made that is pure potentiality: since what has been made must needs be so long as it is (Phys. vi): and what is purely potential, is not simply.
- 4. If, as Augustine holds, the words of Scripture, The earth was void and empty signify matter utterly devoid of form we are not to suppose that it was ever actually so, but that its nature was such if we consider it apart from inherent forms.
- 5. The formation of a spiritual creature may be understood in two ways: first by the infusion of grace, secondly by the consummation glory. The first, according to Augustine's opinion, was bestowed on the spiritual creature from the first moment of its creation: and in that case the darkness from which the light was divided does not signify the sin of the wicked angels, but the formless state of the nature, which was not formed as yet but remained to be formed by subsequent works (Gen. ad lit. i). —Or, as he says elsewhere (ibid. iv) the day signifies God's knowledge, and the night the creature's knowledge which is indeed darkness in comparison with God's (ibid.). Or, if the darkness signifies the sinful angels, then this distinction refers to their sin not as actually committed but as foreseen by God: wherefore he says in his work addressed to Orosius (Dial. lxv, QQ. qu. 24): "Foreseeing that some of the angels would fall through pride, by the ordinance of his unfailing prescience he divided the good from the bad, calling the bad darkness and the good light."

The second formation does not belong to the creation of things at the beginning, but rather to their continuation and government by divine providence. For this last, according to Augustine, is true of all those things in which the operation of nature is required, namely that they come at length to this formation: because by the movement of their free-will some turned to God and remained standing, others turned from him and fell.

6. The world is said to have been made of invisible matter, not that formless matter preceded the world in point of time, but by priority of nature. Likewise privation was not at any time in matter before the advent of a form, but matter taken as formless is taken as having a privation.

- 7. It is owing to the imperfection of nature that operates by movement that it proceeds from the imperfect to the perfect: because movement is the act of that which is imperfect. God, however, by reason of the perfection of his power was able at once to give being to perfect things; hence the comparison fails.
- 8. The words of Augustine do not mean that matter was in such potentiality to the elemental forms that it had none of them: but that considered in its essence it includes no form actually, but is in potentiality to them all.

Q. IV: ARTICLE II

Was Matter Formed All At Once Or by Degrees?

[Sum. Th. I Q. lxvii-lxxii]

THE second point of inquiry is whether matter was formed all at once or by degrees: and seemingly it was formed by degrees.

- 1. It is written (Judith ix, 4) Thou hast done the things of old and hast devised one thing after another. Now, with God to devise is to act according to Damascene (De Fide Orthod. ii, 3) hence the text quoted continues: And what thou hast designed hath been done. Therefore things were made in a certain order and not all at once.
- 2. Several parts of time cannot be together at once, because the whole of time is successive. Now according to Genesis i, things were formed at various times. Therefore seemingly things were formed by degrees and not all at once.
- 3. It will be said, perhaps, that according to Augustine (De Civ. Dei ii, 7, 9) those six days are not the days or divisions of time to which we are accustomed, but a six-fold manifestation of things to the angelic mind corresponding to the six classes of things.—On the contrary day is caused by the presence of light, whereupon it is written (Gen. 1, 5) that God called the light day. And light properly speaking is not found in spiritual creatures but only in a

metaphorical sense. Therefore neither can the angels' knowledge be, called day properly speaking. Consequently it would seem not to be a literal exposition of the text to take day as signifying the angelic knowledge. The minor premise is proved thus: Nothing that is a direct object of the senses properly is applicable to the spiritual world: for such things as are common to sense and spirit are not sensible except indirectly, for instance substance, power, virtue and the like. Now light is the direct object of the sense of sight. Hence it cannot be applied properly speaking to spiritual things.

- 4. An angel has two ways of knowing things, in the Word and in their own nature: consequently 'day' must refer to the one, or the other. It cannot signify his knowledge of things in the Word since this is only one in relation to all those things: because an angel, whatsoever things he knows, knows them simultaneously and by one knowledge, seeing that he knows them in the Word. Thus there would be but one day. On the other band if it refer to his knowledge of things in their respective natures, it would follow that there were many more than six days, inasmuch as there are many genera and species of creatures. Hence it would seem that the six days cannot refer to the angelic knowledge.
- 5. It is written (Exod. xx, 9, 10): Six days shalt thou labour but on the seventh day is the Sabbath of the Lord thy God thou shalt do no work on it: and afterwards the reason is given (verse ii): For in six days the Lord made heaven and earth and the sea and all things that are in them, and rested on the seventh day. Now in permitting work on six days and forbidding it on the seventh the Law speaks of days in the literal and material sense. Therefore the days ascribed to God's works are to be taken in the material sense.
- 6. If day signifies the angels' knowledge it follows that to make a thing in a day is nothing else but to produce it in the knowledge of the angels. But it does not follow that if a thing is produced in the angels' knowledge it therefore exists in its own nature, but only that it is known by the angels. Consequently we should not be informed about the creation of things in their respective natures, which is contrary to Scripture.
- 7. The knowledge of any single angel differs from that of any other. If then day signifies an angel's knowledge, there should be as many days as there are angels, and not only six as Scripture tells us.

- 8. Augustine (Gen. ad lit. ii, 7, 8) says that by the words, God said: Let... be made we are to understand that the thing to be made pre-existed in the Word: that by the words, It was so we understand that knowledge of the thing was produced in the intellectual creature: and by the words, God made we understand that the thing was made in itself. If then day signifies the angels' knowledge, then having said of this or that work, And it was so in reference to the angelic knowledge, it was superfluous to add, The evening and morning were the first —or the second day.
- 9. But it will be said that these words are added to indicate the spiritual creature's twofold manner of knowing things. One is his knowledge of things in the Word and this is called morning, or morning knowledge: the other is his knowledge of things in their respective nature, and this is called evening, or evening knowledge.—On the contrary, though an angel can at the same time consider several things in the Word, he cannot at the same time consider several things in his own nature, since he understands different things in their respective natures by means of different species. If then each of the six days has both morning and evening, there must needs have been some kind of succession in the six days, and consequently the formation of things did not take place all at once.

io Several actions cannot proceed from one power at the same time, any more than one straight line can terminate at one end in more than one point: since power terminates in action. Now the consideration of things in the Word and in their respective natures is not one but several actions. Therefore morning and evening knowledge are not simultaneous, and thus again it follows that there was succession in those six days.

- 11. As stated above (A. i) Augustine explains the division of light from darkness as that of the formed creature from the informed matter which had yet to be formed: so that after one creature had been formed on the part of its matter there still remained another creature to be formed, and consequently matter was not formed all at once.
- 12. According to Augustine the angels' morning knowledge signifies their knowledge of the Word in whom they knew the creatures yet to be made. But this would not be the case if the creatures whose formation is assigned to the following days were formed at the same time as the angels. Therefore all things were not created at the same time.

- 13. In spiritual matters a day is spoken of by way of comparison with the material day. Now in the material day morning precedes evening. Therefore in these days evening should not have been mentioned before the morning: Evening and morning were the first day.
- 14. Between evening and morning is night, and between morning and evening is midday. Hence as Scripture mentions evening and morning, it should have mentioned midday also.
- 15. Every material day has both evening and morning. But this is not the case with these seven days: for the first has no morning, and the seventh has no evening. Therefore it is unreasonable to compare these days with ours.
- 16. It might be said that the first day has no morning because morning signified that knowledge of the creature yet to be made which the angel received from the Word: and, before being made, the spiritual creature could not receive from the Word any knowledge of its own future making.—On the contrary from this it follows that the angel at one time existed whereas other creatures were not yet made, but were still to be made. Therefore all things were not made at the same time.
- 17. The spiritual creature does not acquire knowledge of things beneath it from those things themselves: and thus he does not need their presence in order to know them. Consequently before those things were made he could know them as things to be made in their respective nature and not only in the Word: so that knowledge of a thing to be made would seem to belong to the evening as well as the morning knowledge: and thus according to the foregoing exposition, the second day should have had neither morning nor evening.
- 18. Those things which are first simply are first in an angel's knowledge: since the fact that things which are last are first known to us is due to our acquiring knowledge through our senses. Now the types of things in the Word are simply prior to the things in themselves. Therefore the angels' knowledge of things in the Word precedes his knowledge of things in their respective natures and consequently the morning should have been mentioned before the evening and this is contrary to the text of Scripture.

- 19. Things that differ specifically cannot combine to form one. Now knowledge of things in the Word and in their respective natures differ specifically, since the medium of knowledge is entirely different in either case: and, consequently, according to the foregoing exposition, morning and evening could not make one day.
- 20. The Apostle (1 Cor. xiii, 8, 10) says that knowledge will be destroyed in heaven: and this only refers to the knowledge of 'things in their respective natures, which is the evening knowledge. Now in heaven we shall, be as the angels (Mat. xxii, 30). Therefore evening knowledge is not in the angels.
- 21. Knowledge of things in the Word surpasses knowledge of them in their respective natures more than the sun's brightness surpasses candle-light. But sunlight renders useless the light of a candle: and therefore much more does the morning knowledge of the angels render their evening knowledge useless.
- 22. Augustine (Gen. ad lit. vii, 24, 25) queries whether Adam's soul were made apart from his body at the same time as the angels or at the same time as his body. But there would be no purpose in discussing this question if all things were made at the same time, because then the human body was made at the same time as the angels. It would seem then that in Augustine's opinion all things were not made at the same time.
- 23. The portion of earth from which man's body was made had the form of slime according to Genesis ii, 7: and it had not yet the form of a human body. Therefore forms were not all at the same time produced in matter.
- 24. An angel's knowledge of a thing in its own nature can be no other but his knowledge through the species bestowed on him by nature: for it cannot be said that he acquires species from the things perceived, since he lacks sensorial organs. Now these species bestowed on the angels are independent of corporeal things: and thus even before things existed angels could know them in their respective natures. Consequently from the fact that angels knew a thing in its own nature we cannot argue that it was brought into being: wherefore the explanation given above would seem unreasonable.

- 25. The morning knowledge whereby the angels knew things in the Word must needs have been through some species, since all knowledge is such. Now it could not be through a species issuing from the Word, because such a species would be a creature, so that the knowledge produced by it would be evening rather than morning knowledge, since evening knowledge is that which is produced by means of a creature. Nor may it be said that the aforesaid knowledge was acquired by means of a species that is the Word himself, since in that case the angel would see the Word; which he did not do before he was beatified, because the beatific vision consists in seeing the Word. But the angels were not beatified in the first instant of their creation, as neither did the demons sin in that first instant. Therefore if morning signifies the knowledge which angels have in the Word, we must infer that all things were not created at the same time.
- 26. It will be said, perhaps, that in that instant the angels saw the Word as the type of things to be created, but not as the end of the Blessed.—On the contrary there is only a relative difference between the Word considered as end and considered as type. Now the knowledge of God's relation to creatures is not beatific, seeing that this relation in reality is in the creature rather than in God: and it is only the vision of the divine essence that is beatific. Consequently, as regards the bliss of those who see the Word, it matters not whether they see him as the end of beatitude or as a type.
- 27. Prophets also are said to have seen the future in the mirror of eternity, inasmuch as they saw the divine mirror as reflecting future events: and then there would be no difference between the angel's morning knowledge and the knowledge of a prophet.
- 28. It is written (Gen. ii, 5) that God made every plant of the field before it sprung up in the earth, and every herb of the ground before it grew. Now the herbs were brought forth on the third day. Hence some things were made before the third day, and all were not made at the same time.
- 29. It is written (Ps. ciii, 24) that God made all things in wisdom. Now a wise man does things in an orderly way (Metaph. i, 2). Therefore, seemingly, God did not make all things together, but in order of time and by degrees.
- 30. It might be said that though order of time was not observed in the creation, the order of nature was.—On the contrary in the order of nature the sun, moon and stars precede

the plants, for it is clear that they are causes of plants: and yet we are told that the heavenly, lights were made after the plants. Therefore the order of nature was not observed.

- 31. The heavenly firmament naturally precedes earth and water, and yet Scripture mentions these before the firmament which we are told was made on the second day.
- 32. The subject naturally precedes its accident. Now light is an accident and its first subject is the firmament. Therefore the creation of light would not precede that of the firmament.
- 33. Animals that walk are more perfect than those which swim or fly, principally by reason of their likeness to man: and yet the creation of fishes and birds is related before that of terrestrial animals. Therefore the right order of nature was not observed.
- 34. Fishes and birds seemingly do not in their respective natures differ from each other more than from terrestrial animals: and yet we are told that fishes and birds were created on the same day. Therefore the days do not correspond to various kinds of things, but rather to various successive times and then all things were not created at the same time.
- 1. On the contrary it is written (Gen. ii, 4, 5): These are the generations of the heaven and the earth when they were created in the day that the Lord made the heaven and the earth, and every plant of the field. Now we are told that the plants of the field were created on the third day: while heaven and earth were made on the first day, or even before all days. Hence the things made on the third day were created on the same day as those which were made on the first day or before all days: and thus in like manner all things were made at the same time.
- 2. Again it is written (Job xl, 10): Behold Behemoth whom I made with thee. Now according to Gregory (Moral. xxxii, 9) Behemoth signifies the devil, who was made on the first day or before all days: while man, to whom the Lord's words are addressed, was made on the sixth day. Hence things made on the sixth day were created together with those that were made on the first day: and so we arrive at the same conclusion as before.

- 3. Again, parts of the universe depend on one another, especially the lower on the higher parts. Therefore it was impossible for some parts to be made before others, especially the lower before the higher.
- 4. Again there is a greater difference between corporeal and spiritual creatures than between one corporeal creature and another. Now, as we have already shown, the spiritual and corporeal creatures were made at the same time. Therefore, a fortiori, all spiritual creatures were made at the same time.
- 5. Again by reason of the immensity of his power God works in an instant: and thus the work of each day was accomplished suddenly and instantaneously. Therefore there is no sense in saying that he waited until the next day to do his next work, and remained idle for a whole day.
- 6. Further if the days mentioned in the story of the creation were ordinary days, it is difficult to understand how the night could be wholly distinct from the day, and light from darkness. For if the light which we are told was made on the first day enveloped the whole earth, nowhere was there darkness, which is the earth's shadow cast on the side opposite to the light that causes day. And if that light by its movement revolved around the earth so as to cause day and night, then there was always day on one side, and night on the other, and consequently night was not wholly divided from the day, and this is contrary to Scripture.
- 7. Again the division between day and night is caused by the sun and other heavenly luminaries, wherefore it is written in the story of the fourth day (verse 14): Let there be lights made in the firmament of the heaven and the text continues and let them be for signs and for seasons and for days and years. Seeing then that the effect does not precede its cause, it cannot be that the first three days were of the same kind as the days which are regulated by the sun: and consequently the mention of those days is no proof that things were made one after the other.
- 8. Moreover if then there was some other light which by its movement caused day and night, there must have been some vehicle with a circular movement to carry this other light and cause a succession of day and night. Now this vehicle would be the firmament which

we are told was made on the second day. Therefore at least the first day could not be the same kind of day as those we have now, nor likewise as the other days of the text.

9. Again if that light was made that it might produce day and night, it would also do so now: for it is unreasonable to say that it was made solely to serve this purpose for the three days that preceded the creation of the sun, and that afterwards it ceased to exist. But there is no other light now besides the sun that causes day and night. Therefore neither during those three days was there any other corporeal light to cause the distinction between day and night.

10. Someone might say that this light was afterwards resolved into the solar body.—On the contrary whenever a thing is made out of pre-existent matter, it is composed of a matter susceptive of a succession of forms. But such is not the matter of which the sun or any other heavenly body is composed, because in them there is no contrariety (De coel. et mund. i). Therefore it is impossible that the sun was afterwards formed out of that light.

I answer that in the supposition that formless matter did not precede its formation in point of time but only in point of origin (and it could not be otherwise if formless matter signify matter entirely devoid of form) it follows of necessity that the formation of things was simultaneous, since it is not possible for any part of matter to be even for an instant entirely formless. Besides, as regards that particular part, matter would precede its formation in point of time. Wherefore if we adopt the opinion of Augustine as discussed in the preceding article, there is no reason to propose the question at the head of this article, and we must state at once that all things were formed at the same time, except in so far as it remains for us to explain in what sense we are to take the six days mentioned by Scripture. For if we are to take them to be like the days we have now, this would be in contradiction with the aforesaid opinion, since then we should have to hold that the formation of things took place during a series of days.

Augustine explains these days in two ways. First in his opinion (Gen. ad lit. i, 17) the distinction of light from darkness signifies the distinction of formed from formless matter which awaited its form, the difference being one not of time but of the order of nature. He holds that the order between formlessness and formation according as all things are ordered by God is implied by day and night, for day and night are an ordering of light and darkness. He says that evening denotes the termination of the work done: and morning the future beginning of the work, future not in the order of time but in the order of nature: for

the first work contains already a kind of indication of the future work to be done. According to this view we must take the days as being distinct from one another inasmuch as there were various formations and consequently a lack of various forms.

Since however it would follow from this that the seventh day also was distinct from the first six, if these also were distinct from one another (whence it would seem to follow either that God did not make the seventh day, or that he made something after the seven days wherein he completed his work) he (Augustine) maintained in consequence, that all these seven days were but one, namely the angelic knowledge, and that the number refers to the distinction between the things they knew rather than to a distinction of days: in other words that the six days signify the angel's knowledge in reference to the six classes of things created by God, while one day signifies the angel's knowledge in reference to the Maker's rest, in that he rested in himself from the things be had made: so that evening signifies knowledge of a thing in its own nature, and morning, knowledge in the Word.

According to other holy men these days denote order of time and succession in the production of things. In their opinion there was order not only of nature but also of time and duration in the works of the six days: for they contend that as matter was in a formless condition before its formation, so also one formation preceded another in the order of time. Because (as stated in the preceding article) by the formless condition of matter they did not understand the lack and exclusion of all form (since heaven, water and earth by which they understood the heavenly bodies, were already in existence, besides spiritual substances, and the four elements under their respective forms) but the mere absence and exclusion of the due distinction and perfect comeliness of each thing, in that it was lacking in that finish and beauty now to be seen in the corporeal creature. Thus we can gather from the text of Genesis, that the corporeal nature was lacking in a threefold beauty, for which reason it is described as being formless.—The heavens and the entire diaphanous body lacked the comeliness and beauty of light: and this is denoted by the darkness. The element of water lacked due order and distinction from the element of earth: and this lack of form is designated by the word deep, which signifies a certain inordinate immensity of the waters according to Augustine (Cont. Faust. xxii, ii).—The earth lacked a twofold beauty: one which it acquired by the withdrawal of the waters, and this is signified by the words: And the earth was void and empty —or invisible, because it could not be seen by reason of the waters covering it on all sides: the other which it acquires through being adorned with plants, and this is indicated when it is said that it was empty or incomposite, i.e. unadorned. Thus then before the work of distinction Scripture mentions a manifold distinction as already existing in the elements of the world from the beginning of its creation. First it mentions the distinction between heaven and earth in so far as the heaven

signifies the entire transparent body which includes fire and air on account of their transparency which they have in common with the heaven. Secondly it mentions the distinction of the elements as regards their substantial forms, by naming water and earth which are more perceptible to sense, and thus implying the others which are less apparent. Thirdly it mentions positional distinction: for the earth was beneath the waters which concealed it, while the air which is the subject of darkness is indicated as being above the waters in the words, Darkness was over the face of the deep. Accordingly the formation of the first body, namely the heaven, took place on the first day by the production of light whose illuminating property was communicated to the sun and heavenly bodies which already existed in respect of their substantial forms, and thus their formlessness of darkness was removed. From this formation resulted the distinction of movement and time, namely of night and day, since time is consequent to the movement of the higher heaven. Hence the text mentions the distinction of light and darkness: since the cause of light was in the substance of the sun, and the cause of darkness was in the opaqueness of the earth: so that while there was light in one hemisphere, there was darkness in the other, and again in the one hemisphere light at one time and darkness at another. This is expressed in the words, He called the light day, and the darkness might.—On the second day took place the formation and distinction of the middle body, namely water, by the formation of the firmament in that it was given parts and order. Thus under the name of water are comprised all transparent bodies: so that the firmament or starry heaven produced on the second day, not in substance, but as to a certain accidental perfection, divided the waters that are above the firmament (from those that are beneath it). By the firmament is meant the whole trans~ parent heaven without the stars, known also as the I aqueous' or crystalline heaven. Philosophers say that it is the ninth sphere and the first moving body, which causes the whole heaven to revolve as a daily movement, and producing by that movement a continuity of generation. In like manner the starry heaven by its zodiacal movement causes diversity in generation and corruption, by approaching to or receding from us and by the varying power of the stars. The waters beneath the firmament are the other corruptible transparent bodies. Consequently these lower transparent bodies signified under the name of waters received from the firmament a certain order and were divided into fitting parts.—On the third day was formed the lowest body, namely the earth, in so far as it was freed of its watery covering, and the lowest division was made of the sea from the dry land. It was thus not unfitting that the text having expressed the formless condition of the earth in the words, The earth. was invisible or empty, should signify its formation in the words And let the dry land appear, and the waters being gathered together into one place apart from the dry land, and God called the dry land Earth, and the gathering together of the waters he called Seas: and whereas the earth was hitherto void and empty he adorned it with plants and herbs.—On the fourth day took place the adornment of the first part of the corporeal creature, which had been divided on the first day, the adornment to wit of the heavens by the creation of the

luminaries. These as to their substance were created from the beginning, but whereas then their substance was formless now on the fourth day it is formed, not indeed with a substantial form, but by receiving a certain fixed power, inasmuch as these luminaries were endowed with certain powers for certain effects, as evinced by the different effects produced by solar, lunar or stellar rays. Dionysius (Div. Nom. iv) refers to this distinction of powers when he says that the light of the sun was formed on the fourth day, whereas hitherto it had been formless. If Scripture makes no mention of these luminaries from the outset but only on the fourth day, it was according to Chrysostom. in order to keep the people from idolatry, by showing that the luminaries were not gods, seeing that they did not exist from the beginning.—Qn the fifth day, the second part of corporeal nature which had been divided on the second, day was adorned by the creation of birds and fishes. Wherefore on this fifth day Scripture mentions the waters and the heavenly firmament, so as to show that the fifth day corresponds to the second, where mention was made of the waters and firmament. On this day then by God's word the birds and fishes in their respective, natures were brought into actual being from the already created elemental matter in order to adorn the air and the water which are a fitting medium for their animal movements.—On the sixth day the third part of corporeal nature and the lowest body, namely the earth, was adorned by the creation of terrestrial animals to which it is connatural to move on the earth. Hence just as in the work of creation the text indicates a threefold division of corporeal creatures, the first signified under the name of heaven, the middle signified under the name of water, and the lowest signified under the name of earth; while the first part, i.e. the heaven was distinguished on the first day and adorned on the fourth, the middle part, i.e. the waters, distinguished on the second day and adorned on the fourth, as we have stated; so was it fitting that the lowest part, i.e. the earth which was distinguished on the third day, should, be adorned on this the sixth day by the terrestrial animals being brought into actual existence and divided into various species.

From all this it is clear that Augustine differs from other holy men in his explanation of the works of the six days. First, by the earth and water first created he understands primal matter utterly devoid of form, and by the creation of the firmament, the gathering together of the waters and by the uncovering of the dry land he understands the introduction of substantial forms into corporeal matter. Whereas the other saints take the earth and water first created to signify the elements of the world existing each under its own form, and the subsequent works to indicate some kind of division of the already existing bodies through their receiving certain powers and accidental properties, as stated above.—Secondly they differ in respect of the production of plants and animals: since the other saints say that these were actually produced in their respective natures during the work of the six days, whereas Augustine holds that they were produced only potentially.—Thirdly in holding (Gen. ad lit. iv, 34) that all the works of the six days took place at the

same time Augustine apparently does not differ from the others as to the manner in which things were produced.—First, because both views agree in saying that in the first production of things matter was the subject of the substantial forms of the elements, so that primal matter did not precede the substantial forms of the elements of the world by a priority of duration.—Secondly because both opinions are agreed that in the first production of things by the work of creation plants and animals were not brought into actual but only potential existence, inasmuch as they could be educed from the elements by the power of God's word.

There is however a fourth point in which they differ. According to the other saints after the first production of the creature when the elements of the world and the heavenly bodies as to their substantial forms were produced, there was a time when there was no light: also when the firmament was not yet formed, or the transparent body adorned and made distinct: also when the earth was still covered with the waters, and as yet the luminaries were not formed. This is the fourth point wherein they differ from the view of Augustine who (l.c.) held that all these things were formed together in the same instant of time.

That the works of the six days according to the other saints were produced not simultaneously but by degrees, was not owing to lack of power in the Creator who could have produced all things at once, but was directed to the manifestation of God's wisdom in the production of things, in that when he made things out of nothing he did not at once bring them from nothingness to their ultimate natural perfection, but conferred on them at first an imperfect being, and afterwards perfected them, so that the world was brought gradually from nothingness to its ultimate perfection. Thus different days corresponded to the various degrees of perfection, and it was shown that things derived their being from God, against those who contended that matter was uncreated, and that moreover he is the author of their perfection, against those who ascribed, the formation of the lower world to other causes.

The first explanation of these things namely that held by Augustine is the more subtle, and is a better defence of Scripture against the ridicule of unbelievers: but the second which is maintained by the other saints is easier to grasp, and more in keeping with the surface meaning of the text. Seeing however that neither is in contradiction with the truth of faith, and that the context admits of either interpretation, in order that neither may be unduly favoured we now proceed to deal with the arguments on either side.

Reply to the First Objection. In the divine works order of nature and origin and not of duration was observed. Formless spiritual and corporeal natures were formed first by priority of nature and origin. And though both natures were formed at the same time; inasmuch as the spiritual nature naturally transcends the corporeal, its formation preceded that of the corporeal nature in the order of nature. Again since an incorruptible corporeal nature transcends a corruptible nature, it behoved the former to be formed first in the order of nature. Wherefore on the first day the formation of the spiritual nature is signified by the creation of light, whereby the mind of the spiritual creature was illumined through its conversion to the Word. On the second day the formation of the corporeal nature heavenly and incorruptible, is signified by the creation of the firmament, which we understand to include the production of all the heavenly bodies and their distinction in respect of their various forms. —On the third day the formation of the corporeal nature of the four elements is signified by the gathering together of, the waters and the appearance of the dry land.—On the fourth day the adornment of the heaven is signified by the creation of the luminaries, and this in the order of nature should precede the adornment of the waters and the earth which took place on the following days. Thus God's works were wrought in order indeed, not of duration but of nature.

Reply to the Second Objection. Things were not formed by degrees nor at various times: all these days which the text assigns to God's works are but one day described as present to each of the six classes of things and numbered accordingly: even so God's Word by whom all things were made is one, namely the Son of God, and yet we read repeatedly God said... And just as those works persevere in his subsequent works which are propagated from them by the agency of nature, so do, those six days continue throughout the succeeding time. This may be made clear as follows. The angelic nature is intellectual and is properly described as light, and thus the enlightening of the angel should be called day. Now the angelic nature when things were first created was given the knowledge of these things, so that in a manner of speaking the light of the angel's intellect was made present to the things created, in so far as they were made known to the light of his mind. Hence this knowledge of things, implying that the light of the angelic intellect is made present to the things known, is called day: and various days are distinguished and ordered according to the various classes and order of the things known. Thus the first day is the knowledge of God's first work in forming the spiritual creature and converting it to the Word.—The second day is the knowledge of the second work whereby the higher corporeal creature was formed by the creation of the firmament.—The third day is the knowledge of the third work of the formation of the corporeal creature in respect of the lower part, namely the earth, water and neighbouring air.—The fourth day is the knowledge of the fourth work or the adornment of the higher part of the corporeal creature, that is of the firmament by the creation of luminaries.—The fifth day is the knowledge of the fifth divine work whereby the

air and water were adorned by the creation of birds and fishes.—The sixth day is the knowledge of God's sixth work, namely of the adornment of the earth by the, creation of terrestrial animals.—The seventh day is the angelic knowledge as referred to the Maker's rest in that he rested in himself from the production of new works.

Now since God is all light, and there is no darkness in him, God's knowledge in itself is pure light: whereas the creature through being made from nothing contains within itself the darkness of potentiality and imperfection, and consequently the knowledge of which a creature is the object must needs be mingled with darkness. Now a creature may be known in two ways: either in the Word, as the outcome of the divine scheme, and thus the knowledge of it is called morning knowledge, because as the morning is the end of darkness and the beginning of light, so the creature, whereas before it was not in existence, receives a beginning of light from the light of the Word. Secondly a creature is known as existing in its own nature: and this is called evening knowledge, because as the evening is the end of light and verges into night, so the creature as subsistent in itself terminates the operation of the light of the divine Word, in that it is made thereby, and of itself would fall into the darkness of its deficiencies were it not upheld by the Word. And so this knowledge being divided into morning and evening is called day: for just as in comparison with the Word's knowledge it is darksome, so in comparison with that ignorance which is darksome, it is light. In this way we may observe a certain circular movement of day and night, inasmuch as the angel knowing himself in his own nature referred this knowledge to the praise of the Word as his end, and in the Word as principle received the knowledge of the next work. And as this morning is the end of the preceding day so is it the beginning of the next day: for day is a part of time and the effect of light. And the distinction of those first days is not a distinction of different times, but refers to the spiritual light according as divers and distinct classes of things were made known to the angelic mind.

Reply to the Third Objection. The statement that light properly speaking is not in spiritual things, is untrue. For Augustine (Gen. ad lit. iv, 24) says that in spiritual things light is better and more certain; also that light is said of Christ otherwise than stone; for he is light properly speaking, and stone metaphorically. The reason is that all that is made manifest is light (Eph. iv, 13): and manifestation belongs more properly to spiritual than to corporeal things. Hence Dionysius (Div. Nom. iv) numbers light among the intelligible names of God, and intelligible names belong properly to the spiritual world. In proof of the opposite statement it is said that the name light was first employed to signify the cause of manifestation to sight: and in this. way light is a quality directly perceptible to sense, and is not properly applied to spiritual things. It is however extended by common use so as to

signify anything that causes a manifestation in any kind of knowledge; so that it bears this signification in ordinary language and in this way light belongs more properly to spiritual things.

Reply to the Fourth Objection. As we have stated above, these days are differentiated not in respect of succession in knowledge, but according to the natural order of the things known. Hence Augustine (De Civ. Dei xiv, 7, 9) holds that these seven days are one day represented by things in seven ways. Consequently the order of the days should be referred to the natural order of the works, which are assigned to days, each day corresponding to certain things which by the angelic intellect are known simultaneously in the Word.

Reply to the Fifth Objection. The six days wherein God is said to have created the heaven, the earth, the sea and an that are in them, do not signify a succession of time, but the angelic knowledge as referred to six classes of things created by God, while the seventh day is the angel's knowledge as referred to the rest of the Maker. For in Augustine's opinion (Gen. ad lit. iv, 15) God is said to have rested on the seventh day inasmuch as he revealed to the angelic mind the rest whereby he rested in himself from the things created, whereby he is happy in himself and needs not creatures, being all-sufficient to himself: and this knowledge Augustine calls day.—God is said to have rested from work on the seventh day, because afterwards he did nothing new that in some way did not already exist either materially or causally or in respect of some specific or generic likeness in the works of the six days.—And whereas after the completion of all his works God rested in himself on the seventh day, Scripture and the Law commanded the seventh day to be kept holy. For then especially is a thing holy when it rests in God; thus things dedicated to God (e.g. the tabernacle, the vessels, the ministers) are called holy things. Now the seventh day was dedicated to the worship of God and for this reason it is said to be kept holy. Accordingly as God after producing six classes of creatures and making them known to the angelic mind, rested not indeed in the things he had created as though they were his end, but in himself and from the things he had created: inasmuch as he himself is his own beatitude (since he is not made happy by making things, but through being all-sufficient to himself and heeding not the things he made),—even so are we to learn to rest not in God's works nor in ours, but from work and in God in whom our happiness consists. In fact for this very reason was man commanded' to labour in his own works for six days, and to rest on the seventh applying himself to the worship of God and resting in the meditation of divine things, wherein his sanctification chiefly consists.

Again the newness of the world proves in a striking manner the existence of God and that he needs not creatures: wherefore man was commanded in the Law to rest and hold festival on the seventh day which saw the completion of the world, in order that the novelty of the world produced all at once and the six different classes of things might keep man in continual remembrance of God, and lead him to give thanks to him for the great and fruitful boon of the creation, so as to rest his thoughts in him as his end, in this life by grace, in the future life by glory.

Reply to the Sixth Objection. Every new work of God as referred to the angelic knowledge is called a day: and as there were but six classes of things created in the beginning by God and made known to the angelic intellect, as stated above, so are there but six days: to which the seventh is added, namely the same angelic knowledge as referred to God's rest in himself. For God produced nothing in nature without first, in the order of nature, making it known to the angel's mind.

The Reply to the Seventh Objection is clear from what has been said: because these days are not differentiated in relation to a difference in the angelic knowledge, but by the different primordial works as referred to that knowledge: so that those first days are distinct in reference to different works and not in reference to different knowledges. Hence these six days are distinct according as the light of the angelic mind is shed on the six classes of things made known to it.

Reply to the Eighth Objection. According to Augustine these three denote the threefold being of things. First, their being in the Word: for things have being in the divine art which is his Word, before they have being in themselves: and this is signified by the words, God said: Let ... be made, i.e. He begot the Word in whom things were before they were made.—Secondly, things have being in the angelic mind, because God created nothing in nature, without having previously revealed its nature to the angelic mind: and this is signified in the words, it was so done, namely by the outpouring of the Word into the angel's intellect.—Thirdly, things have being in their own nature: and this is signified when it is said, He made. For even as the art to which the creature is fashioned is in the Word before it is produced in the creature so in the order of nature was knowledge of that same art in the angelic mind before the creature was produced. Thus the angel has a threefold knowledge of things, namely as they are in the Word, as they are in his mind, and as they are in their respective natures. The first is called morning' knowledge, while the other two are included in evening' knowledge: and in order to indicate this twofold mode of a spiritual creature's knowledge of things, it is said: Evening and morning were one day.

Accordingly by these six days wherein we read that God made all things, Augustine understands (De Civ. Dei xi, 9) not these ordinary days that are measured by the course of the sun, since we are told that the sun was created on the fourth day, but one day, that is the angelic knowledge made present to the six classes of things. Thus even as the presence of a corporeal luminary by its shining on this lower world makes a temporal day, so the presence of the spiritual light of the angelic mind by its shining on creatures makes a spiritual day: so that in his opinion these six days are differentiated according as the light of the angel's intellect shines on the six classes of things made known to it: and the first day is his knowledge of God's first work, the second day, his knowledge of the second work, and so on. Consequently these six days differ not in the order of time or of the succession of things, but in the natural order of the things known, in so far as one thing was known before another in the order of nature. And just as in a natural or material day the morning is the beginning and the evening the end and term, even 'so the angel's knowledge of each work in its original being, namely as having its being in the Word, is called morning knowledge: while the knowledge thereof in respect of its ultimate being, and as existing in its own nature, is called evening knowledge. For the origin of everything's being lies in the cause whence it issues: while its term lies in its recipient which terminates the action of its cause. Wherefore the first knowledge of a thing is the consideration thereof in the cause whence it comes: while the ultimate knowledge of a thing is the consideration of that thing in itself. Since then the being of things issues from the eternal Word as from their original principle, and this issue terminates in the being that things have in their respective natures, it follows that knowledge of things in the Word which has for its object their first and original being, should be called morning knowledge, by way of comparison with the morning which is the beginning of day: whereas knowledge of a thing in its own nature, which has for its object its ultimate and terminated being, should be called evening knowledge since the evening ends day. Hence as the six classes of things in relation to the angelic knowledge differentiate the days, even so the unity of the thing known which is knowable by various modes of cognition constitutes the unity of the day, which itself is divided into evening and morning.

Reply to the Ninth Objection. An angel is unable directly and principally to understand in their own natures several things, but he is well able to understand several things indirectly as related to one intelligible object. And whereas all things that were produced in their respective natures, were in the order of nature first impressed in the shape of images on the angelic mind, the angel by knowing himself, at the same time, so to say, knows those six classes of things in their natural mutual co-ordination, since by knowing himself, he knows whatsoever has being in himself.

Reply to the Tenth Objection. One power can exercise two operations at the same time, if one of these is referred and ordered to the other; 'thus it is evident that the will at the same time wills the end and the means, and the intellect at the same time understands the premises and the conclusions through the premises, provided that it knows the conclusions. Now the angels' evening knowledge is ordered to their morning knowledge, according to Augustine (Dial. lxv QQ. qu. 26: Super Genes. ii, 3, 8), just as natural knowledge and love are ordered to heavenly knowledge and love. Wherefore nothing hinders an angel from having at the same time morning and evening knowledge, just as natural and heavenly knowledge are together. For one power cannot exercise at the same time two operations that proceed from two species of the same kind, if the one be not ordered to the other (and such are all created non-subsistent intelligible species), so that an angel cannot at the same time produce several intellectual acts by means of several concreated species. But if those two operations proceed from forms generically different and disparate one of which is ordered to the other (and such are a subsistent uncreated form, and a non-subsistent created form), then they can be produced simultaneously. Wherefore since the angel's knowledge of things in their respective natures, which is called evening knowledge is exercised by means of a created non-subsistent intelligible species, while his knowledge of things in the Word, which is called morning knowledge is exercised through the subsistent essence of the Word; and since these two are generically distinct and disparate, yet one is ordered to the other, it follows that both knowledges can be exercised at the same time. The reason is that a concreated species inhering in the intellect is not incompatible with the union of the intellect to the essence of the Word, which actuates the intellect not in respect of being but only in respect of understanding, inasmuch as it is disparate and of a higher order, and this same inherent species and whatsoever of perfection there is in the created intellect are by way of a material disposition to that union and blessed vision whereby things are seen in the Word. Hence just as disposition to a form and the form itself can coexist in that which is actually complete, so the inhering intelligible species coexists with the intellect's union to the essence of the Word, in the intellect's perfect operation. Wherefore a twofold operation issues simultaneously from the intellect of the blessed angel; one by reason of its union to the essence of the Word and whereby it sees things in the Word, and this is called morning knowledge; the other by reason of the species inhering to it, whereby it sees things in their own nature, and this is called evening knowledge. Neither of these actions is weakened or lessened by attention to the other, on the contrary it is strengthened, seeing that the one leads to the other, even as the imagination of what one has seen is more vivid when the thing is actually present to the eye. For the action whereby the blessed see the Word and things in the Word is the reason of their every action. And when of two actions one is the reason of the other or is ordered to the other, both of them can be exercised at once by the same power. In that case the one power terminates in different actions in respect of different species mutually ordered the one to the other, not in the same respect but in

different respects. For species that differ in genus and order, or that are disparate, can be united together in respect of a perfect act, for instance colour, smell and taste in fruit. Now the divine essence, whereby the angel's intellect sees things in the Word is uncreated and self-subsistent: the essence of an angel whereby he sees always himself and things as having being in himself is created and self-subsistent by reason of the being he had received and by which his intellect subsists; and the infused or concreated intelligible species, whereby he sees things in their own nature is non-subsistent: wherefore these three are different in order and genus, and disparate, so that the first is as it were the reason of the others, and the second the reason of the third: consequently the angelic intellect will be able to have a threefold operation in respect of those three forms. Even so the soul of Christ at the same time understands things by the species of the Word, as by infused, and by acquired species.

Reply to the Eleventh Objection. just as in the opinion of Augustine (Ad Oros. qu. xxi) the informity of matter preceded its formation by priority not of time but of order (as sound and voice precede the song), so the formation of the spiritual nature signified in the creation of light, since this is more noble than the corporeal nature, preceded the formation of the latter in the order of nature and origin but not of time. Now the formation of the spiritual nature consists in its being enlightened so as to adhere to the Word, not indeed by perfect glory, with which it was not created, but by perfect grace with which it was created. Accordingly by this light the distinction was made from darkness, to wit from the formless condition of the corporeal creature as yet unformed, yet in the order of nature to be formed afterwards. Because the formation of the spiritual creature may be taken in two ways. First, as denoting the infusion of grace, second, as denoting the conservation of glory. The former according to Augustine was vouchsafed the spiritual creature from the very first instant of its creation, in which case the darkness from which the light was divided does not denote the sin of the wicked angels, but the formless condition of nature which was not yet formed, but in the order of nature was to be formed in the subsequent works (Gen. ad lit. i, 5, 6, 7).—Or again (Super Gen. iv, 22, 23) day signifies God's knowledge, night the creature's, which latter is darkness in comparison with God's (ibid.).—Or again if darkness be taken to signify the wicked angels, then this distinction refers to their sin not as present but as future to God's foreknowledge. Hence (Ad Oros. qu. xxiv) he says: "God foreseeing that some of his angels would fall through pride, by the unchangeable order of his foreknowledge, divided the good from the wicked, and called the wicked darkness, the good, light."

The second formation of the spiritual nature does not belong to the beginning of things, but rather to their course in which they are governed by divine providence. Hence the

distinction of light from darkness, if by darkness we understand the sins of the demons, must be taken in reference to God's foreknowledge. Wherefore Augustine says (De Civ. Dei xi, 19) that he alone could divide light from darkn,ess who before the angels fell could foresee that they would fall. But if by darkness we understand the formless condition of matter yet to be formed, the order is signified not of time but of nature between the formations of both natures.

Reply to the Twelfth Objection. If we suppose that all things were created at the same time as to both matter and form, then the angel is said to have been cognisant of the future creation of the corporeal creature, not as though the corporeal creature were future in point of time, but because it was known as future inasmuch as it was seen in its cause in which it existed already as something that could issue therefrom. Thus he who knows a chest in the materials of which it is made, may be said to know the chest as a future thing. For the knowledge of a thing in the Word is called 9 morning' knowledge, whether the thing is already made or has to be made, and refers indifferently to present or future things, since it is conformed to the divine knowledge whereby God knows all things simply before they are made as well as after they have been made. Nevertheless all knowledge of a thing in the Word refers to that thing as yet to be made, whether it be already made or not, in so far as 'yet to be made ' indicates not time but the issue of the creature from its Creator. Even so the artificer has in his art the knowledge of the work he produces, but that knowledge refers to the work as something he intends to make even when it has already been made. Wherefore for this reason, although the corporeal creature was made at the same time as the spiritual nature, the angel is nevertheless said to have known the corporeal creature in the Word as something yet to be made, for the reason already given.

Reply to the Thirteenth Objection. Even as morning precedes evening, so the morning precedes the evening knowledge in the order of nature, not in respect of one and the same work but in respect of different works. Nevertheless evening knowledge of a prior work is understood to precede morning knowledge of a later work. For the work of the first day was the creation of light, whereby we understand the formation of the angelic nature by the enlightenment of grace; while the knowledge whereby the spiritual creature knows himself is consequent to its being in his own nature. Hence in the order of nature the spiritual creature knew himself in his own nature by 'evening' knowledge whereby he knew himself as already created, before he knew himself in the Word in whom he knew God's work as something yet to be done. Accordingly in this knowledge whereby the good angels knew themselves they did not rest, as making themselves the object of their fruition and their own end, because then they would become night as the wicked angels who sinned, but they referred their knowledge to the praise of God. Thus by his knowledge of

himself the good angel was converted to the contemplation of the Word, and this was the beginning of the following day, because in the Word he received knowledge of the following work, namely the firmament. Now just as in continuous time the same 'now' belongs to two periods of tirae, inasmuch as it is the end of the past and the beginning of the future, even so the 'morning' knowledge of the second day terminates the first day and begins the second day, and so on to the seventh day. Consequently on the first day evening alone is mentioned, since the angel first had 'evening' knowledge of himself, and that evening knowledge went forward to 'morning' knowledge, in so far as from contemplation of himself he advanced to the contemplation of the Word, and to the morning, of the next day by receiving in the Word the morning knowledge of the next work. Thus then morning knowledge of one and the same work after the first work naturally precedes the 'evening' knowledge of the same work: but evening knowledge of a previous work naturally precedes morning knowledge of a later work: wherefore as the first day had only an evening, so the seventh day through signifying contemplation of God, which being faultless never wanes has only a morning.

Reply to the Fourteenth Objection. Augustine gives the name of morning knowledge to that which is in full light, so that it includes mid-day knowledge: in fact he calls it sometimes day sometimes morning knowledge.—Or else it may be said that all knowledge of the angelic intellect has a mixture of darkness on the part of the knower, so that no knowledge of an angelic intellect can be called mid-day knowledge, but only that knowledge whereby God knows all things in himself.—Again, since God is all light and no darkness is in him, the knowledge, of God, being all light,, may in itself and absolutely be called mid-day knowledge: whereas a creature being made from nothing has the darkness of potentiality and imperfection, and consequently the knowledge of a creature is mixed with darkness. This mixture is signified by morning and evening, for as much as a creature can be known in two ways.—First in the Word, according as the creature issues from the divine art,—and thus the knowledge thereof is called morning knowledge. because as morning is the end of darkness and the beginning of light, so the creature after darkness, namely after nonexistence, receives a beginning of light from the Word. Secondly the creature is knowable in its own nature by means of a created species, and such knowledge is called evening knowledge, since just as evening is the end of light and verges into night, even so the creature as subsistent in itself is the end of the operation of the Word who is light, in that it is made by him, and so far as it is concerned tends to the darkness of nonexistence unless it were upheld by the Word. And yet this knowledge is called day, because as in comparison with the knowledge of the Word it is darksome, so in comparison with ignorance which is altogether darksome, it is called light; even so the life of the just man is said to be darksome as compared with the life of glory, and yet is called light in comparison with the life of the wicked. Again seeing that morning and evening are parts of

a day, and that day in the angels is knowledge illumined by the light of grace, it follows that morning and evening knowledge extend only to the gratuitously bestowed knowledge of the good angels, so that the enlightened angel's knowledge of God's works is called day, and the days are distinguished in reference to the various kinds of divine works as known, and are arranged according to their order. Now each of those works is known by the enlightened angel in two ways. First in the Word or by the species of the Word, and this is called morning knowledge. Secondly, in its own nature, or by a created species. In this knowledge the good angels do not rest as making it their end, because they would become night like the wicked angels: but they refer that knowledge to the praise of the Word and the light of God in whom they know all things as in their source. Wherefore this knowledge of the creature being referred to God is not called night: which it would be were they to rest therein, since they would become night through making a creature the object of their fruition. Accordingly, morning and evening knowledge are divisions of the day, i.e. the knowledge which the good enlightened angels have of the works of creation. Now the good angels' knowledge of a creature, whether through a created or an uncreated medium, has always an element of obscurity; and so it is not called mid-day knowledge as the knowledge of God in himself is; nor is it called night, as that knowledge of a creature which is not referred to the divine light, but it is called morning and evening knowledge, for this reason that evening as such terminates in the morning. Hence not all knowledge of a thing in its nature can be called evening knowledge, but only that which is referred to the glory of the Creator. Thus the knowledge which the demons have of things cannot, strictly speaking, be called either morning or evening knowledge: because morning and evening in reference to the angelic knowledge are not to be likened to it on all points but only in the point of beginning and end.

Reply to the Fifteenth Objection. Although created in grace, the angel was not beatified from the very beginning of his creation, nor did he see God's Word in his essence: wherefore neither had he morning knowledge of himself, which signifies knowledge of a thing through the species of the Word. But at first he had evening knowledge of himself inasmuch as he knew himself in himself naturally, for this reason that in everyone natural knowledge precedes supernatural knowledge, as being the latter's foundation, and an angel's knowledge naturally follows his being in his own nature: so that when he was first created he had not morning but evening knowledge of himself. This knowledge he referred to the praise of the Word and by so doing he merited morning knowledge. It is significant then that the first day is stated to have had only an evening and not a morning, which evening passed into morning: because the spiritual creature which, we are told, was made on the first day, knew itself as soon as it was made. This was evening knowledge, and by referring it to the praise of the Word, it merited the morning knowledge of the next work. For not every knowledge of a thing in its nature can be called evening knowledge but only

that which is referred to the praise of the Creator: since evening recedes and ends with the morning. Hence the knowledge which the demons acquire by themselves about things is neither morning nor evening knowledge: but this can only be said of the knowledge gratuitously bestowed on the good angels. Accordingly the knowledge of things in their respective natures, if it be referred to the praise of the Word, is always evening knowledge: nor does the fact that it is so referred make it morning knowledge, but it makes it terminate therein, and by so doing the angel merits to receive morning knowledge. And just as the first day which signifies the formation and knowledge of the spiritual creature in its own nature, has only an evening, so too the seventh day has only a morning in that it signifies the contemplation of God which being faultless never wanes, and which corresponds to the angels' knowledge in reference to God's rest in himself, while to rest in God is the enlightenment and sanctification of everything. For in that God ceased to fashion new creatures he is said to have completed his work and to have rested in himself from his works. And just as God rests in himself alone, and is happy in the enjoyment of himself, even so we are made happy by enjoying him alone, and thus he makes us to rest in him both from his works and from our own. Accordingly the first day which corresponds to the knowledge which the spiritual creature enlightened by the light of grace had concerning itself, has only an evening: whereas the seventh day which corresponds to the angelic knowledge in reference to God's rest and fruition in himself has only a morning, because in God there is no darkness. For God is stated to have rested on the seventh day inasmuch as he revealed to the angels his own rest whereby he rested in himself from the things he had made. It is the knowledge of this rest that Augustine (Dial. lxv, qu. 26) calls day. And since the creature's rest whereby it stands firm in God, has no end, in like manner God's rest whereby he rests in himself from the things he has made, in that he needs them not, has no end, for he will never need them: hence it is that the seventh day which corresponds to that rest has not an evening but a morning; whereas the other days which correspond to the angelic knowledge in reference to things, have both morning and evening, as already stated.

Reply to the Sixteenth Objection. As we have already explained, it is possible to know a thing already made as something yet to be made, if it be considered in the causes whence it issues: and thus the angels received knowledge in the Word of things to be made, for the Word is the supreme art of things. Because all knowledge of a thing in the Word, otherwise morning knowledge, is said to have for its object the thing as yet to be made, whether or not it be already made; since yet to be made indicates not time but the issue of the creature from the Creator, as stated above (ad 14). Wherefore though the corporeal creature was made at the same time as the spiritual nature, the angel is said by morning knowledge to know in the Word the thing as something yet to be made. Why the first day had no morning but only evening has been explained in the previous Reply.

Reply to the Seventeenth Objection. The spiritual creature does not derive his knowledge from things: he understands them naturally by means of innate or concreated species. Now the species in an angel's mind do not equally refer to the present and the future. Present things have actually a likeness to the forms in the angelic mind, so that by those forms the present can be known: whereas future things are not yet actually like those forms, so that by those forms the future cannot be known, since knowledge is effected by an actual assimilation of the known to the knower. Wherefore, as an angel does not know the future as such, he needs the presence of things in order that by the forms impressed on him he may know things in their respective natures: because before these latter are made, they are not assimilated to those forms. Moreover evening and morning knowledge are differentiated on the part not of the thing known but of the medium of knowledge. Morning knowledge results from an uncreated medium that transcends the nature both of the knower and of the thing known: and for this reason knowledge of things through the species of the Word is called morning whether the things be already made or remain yet to be made: whereas evening knowledge is effected by means of a created medium that is proportionate both to the knower and to the thing known, whether the latter be already made or remain yet to be made.

Reply to the Eighteenth Objection. Although the angel has being in the Word before he has being in his own nature, nevertheless seeing that knowledge presupposes the existence of the knower, he could not know himself before he existed. Now his knowledge of himself in his own nature is natural to him, whereas his knowledge of the Word is supernatural. Hence it behoved him to know himself first in his own nature, before knowing himself in the Word: because in everyone natural knowledge precedes supernatural as its foundation. Other things, however, by his morning knowledge he knew in the Word by a priority of the natural order before knowing them in their respective natures by his evening knowledge: so that in respect of the subsequent works morning preceded evening, as already stated.

Reply to the Nineteenth Objection. As one complete science includes various particular sciences, whereby various conclusions are known, so also the one angelic knowledge which is a kind of whole comprises morning and evening knowledge as its parts, even as morning and evening are parts of the day, albeit disparate. Because things that are mutually disparate if ordered to each other can constitute one whole: thus matter and form which are disparate, constitute one composite; and again flesh, bones and sinews are parts of one composite body. Now the divine essence whereby things are known in the Word by

morning knowledge is the prototype of all the concreated forms in the angelic mind, seeing that these derive from it as from their exemplar, and through them things are known in their own nature by evening knowledge: even as the angel's essence is the type whereby he understands the being which he knows; yet it is not a. perfect type, for which reason he needs other superadded forms. Consequently when an angel sees God in his essence, as also himself and other things by means of concreated species, in a way of speaking he understands one thing: thus because light is the reason for seeing colour, therefore when the eye sees both light and colour it sees in a manner of speaking one visible thing. And although these operations are distinct in reality, seeing that the operation whereby he sees God is everlasting and is measured by participated eternity, and the operation whereby he understands himself is everlasting and is measured by eviternity, while the operations whereby he understands other things by innate species is not everlasting but one succeeds the other, nevertheless since one is ordered to the other, and one is the formal reason as it were of the other, they are so to speak one thing: because where one thing is on account of another there is but one (Top. iii, 2), so that when several operations are mutually ordered the one to the other, they can be simultaneous and constitute one whole.

Reply to the Twentieth Objection. Whereas the intellect is the abode of intelligible species, it follows that the science of setting in order the intelligible species, in other words the intellect's skill and ability in using those species must remain after death, even as the intellect itself which is the abode of those species. On the other hand the manner in which it actually uses them in the present state of life, namely by turning to phantasms which dwell in the sensible powers, will not remain after death: because seeing that the sensible powers will be destroyed, the soul will be unable either by the species acquired in this life, or by the species acquired by it in its state of separation, to understand by turning to phantasms; but it will be able to do so in a manner befitting the mode of being that it will have in likeness to the angels. Hence knowledge will be destroyed not as to the habit, nor as to the substance of the cognitive act that takes its species from the species of the object, but as to the manner of knowing, which will not be by conversion to the phantasms; and this is the meaning intended by the Apostle.

Reply to the Twenty-first Objection. The light caused in the air by the sun and that produced by a candle are of the same kind, and seeing that two forms of the same kind cannot coexist in a perfect state in the same subject, it follows that sun and candle together produce one light in the air. Now the divine essence whereby things are known in the Word differs in kind from the species whereby an angel knows a thing in its nature: wherefore the comparison fails. For when perfection is come the opposite imperfection is

made void: thus on the advent of the vision of God, faith which is of things unseen is made void. But the imperfection of evening knowledge is not opposed to the perfection of morning knowledge, since knowledge of a thing in itself is not, opposed to knowledge of it in its cause: nor again does it involve a contradiction that a thing be known through two mediums one of which is more perfect than the other: even so we may hold the same conclusion by a demonstration and a probable medium. In like manner the same thing may be known by an angel in the uncreated Word and through an innate species; since the one is not opposed, in fact rather is it a material disposition, to the other. Now perfection by its advent removes the opposite imperfection. But the imperfection of nature is not opposed to the perfection of heavenly bliss, in fact it underlies it, just as the imperfection of potentiality underlies the perfection of form: and the form removes not potentiality but the privation to which it is opposed. In like manner the imperfection of natural knowledge is not opposed to the perfection of the beatific knowledge but underlies it as a material disposition. Hence the angel can know things by a created medium in their own nature; and this is 'evening' and natural knowledge; and at the same time by the essence of the Word, which is beatific and' morning 'knowledge." And these two knowledges do not hinder each other, since the one is ordered to the other, and is by way of a material disposition to the other.

Reply to the Twenty-second Objection. Augustine (Super Gen. v, 12, 14) holds that at the very beginning of creation certain things specifically distinct were produced in their respective, natures, such as the four elements produced from nothing, as well as the heavenly bodies and spiritual substances: for this kind of production requires no matter either out of which or in which a thing is made. Also that other things are stated to have been created in their seed-forms, for example animals, plants and men, and that these were all subsequently produced in their respective natures in that work by which God after the six days attends to nature previously established, of which work it is said (Jo. v, 17): My Father worketh until now. Moreover he holds that in the production and distinction of things we should see an order not of time but of nature: inasmuch as all the works of the six days were wrought in the one instant of time either actually, or potentially in their seedforms, in that afterwards they could be made from pre-existent matter either by the Word, or by the active forces with which the creature was endowed in its creation. Wherefore in regard to the first man's soul which, he suggests without asserting it, was created actually at the same time as the angels, he does not hold that it was created before the sixth day, although he holds that on the sixth day it was actually made, and the first man's body as to its seed-forms: for God endowed the earth with a passive potentiality so that by the active power of the Creator man's body could be formed therefrom. Accordingly the soul was actually made at the same time as the body was made in its passive potentiality to God's active power.—Or again, seeing that in truth according to Aristotle (De Anima ii), the soul

is not a complete species in itself but is united to the body as the latter's form, and is naturally a part of human nature, we must infer that the first man's soul was not brought into actual existence before the formation of the body, but was created and infused into the body at the same time as the body was formed, even as Augustine holds (Super Gen. x, 17) with regard to other souls. For God produced the first things in their perfect natural state, according as the species of each one required. Now the rational soul being a part of human nature has not its natural perfection except as united to the body. Hence it naturally has its being in the body, and existence outside the body is non-natural to it: so that it was unfitting for the soul to be created without the body.

If then we adopt the opinion of Augustine on the works of the six days, it may be said that as in those six days the body of the first man was not actually formed and produced, but only potentially in its seed-forms: even so his soul was not produced then actually and in itself, but in its generic likeness; and thus preceded the body during those six days not actually and in itself, but in respect of a certain generic likeness, inasmuch as it has an intellectual nature in common with the angels. Afterwards however, in the work whereby God attends to the creature already produced, the soul was actually created at the same time as the body was formed.

The Reply to the Twenty-third Objection is clear from what has been said. The human body was not brought into actual existence in those six days, as neither were the bodies of other animals, but only in the shape of seed-forms, since God in creating the elements, planted in them certain forces or seeds, so that either by the power of God, or by the influence of the stars or by seminal propagation animals might be produced. Accordingly those things that were actually produced in those six days were created not by degrees but at the same time, while the others were brought into existence as seed-forms in their like.

Reply to the Twenty-fourth Objection. As we have already said in the Reply to the Sixteenth Objection, knowledge of things by innate species that are proportionate to things is called 'evening' knowledge and is of things as subsisting in their respective nature, whether already made or yet to be made. And although those species are related equally to the present or future, the things themselves that are present or future are not equally related to the species because present things are actually assimilated to the species and thus can be actually known thereby; whereas future things are not actually assimilated to them. Therefore it does not follow that they can be known by them. And evening knowledge which is of things in their respective natures is not so called because the angels take from

things the species whereby they understand them, but because by the species received at their creation they understand things as subsisting in their respective nature.

Reply to the Twenty-fifth Objection. In Augustine's opinion (Super Gen. ii, 8) the angels from the very beginning saw the things to be made by the Word. The things which, we are told, were made in the works of the six days were all made at the same time: wherefore those six days were all from the very outset of the creation, and consequently the good angels must have known the Word and creatures in the Word from the very beginning. Creatures have a threefold being as already stated. First in the divine art which is the Word: this is signified when it is said: God said? Let... be made, i.e. He begot the Word in whom such and such a work was before it could be made. Secondly, they have being in the angelic intelligence, and this is signified in the words, It was so done, to wit by the outpouring of the Word. Thirdly they have being in themselves and in their respective natures. In like manner the angel has a threefold knowledge of things: of things as existing in the Word, as existing in his own mind, and as existing in their respective natures. Again the angel has a twofold knowledge of the Word: a natural know ledge whereby he knows the Word by his likeness shining forth in his (the angel's) nature, wherein consists his natural beatitude, and which he can obtain by his natural powers: and a supernatural and beatific knowledge whereby he knows the Word in his (the Word's) essence, and in this his supernatural beatitude consists, which surpasses his natural powers.

By either of these the good angel knows things or creatures in the Word: by his natural knowledge, however, he knows things in the Word imperfectly: whereas by his beatific knowledge he knows things in the Word with greater fullness and perfection.

The first knowledge of things in the Word was received by the angel at the instant of his creation, wherefore it is stated in De Eccl. Dogmat. that "the angels who persevered in the happy state wherein they were created, possess the good they have, not by nature but by grace." Again Augustine (De Fide ad Pet. iii) says: "The angelic spirits received from above the gift of eternity and beatitude when they were created in their spiritual nature." Yet they were not thereby beatified simply, seeing that they were capable of greater perfection, but in a restricted sense, i.e. in relation to the time being. Thus the Philosopher (I Ethic. x) says that some are happy in this life, not simply, but as men. The second or beatific knowledge was bestowed on the angels not from the beginning of their creation, since they were not created in a state of perfect beatitude, but from the moment they were beatified by perfect conversion to the good. Accordingly all these six classes of things were created at the same time together with the angels, and in the same instant the angel by natural knowledge

knew in the Word whatsoever afterwards he knew in the Word more fully by supernatural knowledge, which the angels received immediately on their referring their natural self-knowledge to the praise of the Word: and this same natural knowledge being measured by eviternity, is always coexistent with their supernatural knowledge of the Word, and with their knowledge through innate species, of creatures in their respective natures. Hence these three cognitions are co-existent, nor does one properly speaking follow the other: although, the knowledge of things in the Word, be they already made or yet to be made, is called morning knowledge: while the knowledge of things through a created medium in their own nature, be they present or future, is called evening knowledge.

Reply to the Twenty-sixth Objection. It is not possible that an angel see the Word or divine essence as the type of things to be made, without seeing it as the end of the Blessed and the object of beatitude c since the divine essence in itself is the object of beatitude and the end of the Blessed. For it is not possible to see the divine essence as the type of things to be made without seeing it in itself; wherefore the whole argument is granted.

Reply to the Twenty-seventh Objection. Some with the object of distinguishing between prophetic and beatific knowledge; contended that the prophets see the divine essence itself which they call the mirror of eternity, not however in the way in which it is the object of the Blessed and the end of beatitude, but as the type of things to be done, inasmuch as it contains the types of future events, as stated in the argument. But this is impossible, since God in his very essence is the object of beatitude and the end of the Blessed, according to the saying of Augustine (Conf. v, 4): Happy whoso knoweth thee, though he know not these, i.e. creatures. Now it is not possible, to see the types of creatures in the very essence of God without seeing it also, both because the divine essence is the type of all things that are made (the ideal type of the thing to be made adding nothing to the divine essence save only a relationship to the creature); and because knowledge of a thing in itself (and such is the knowledge of God as the object of heavenly bliss) precedes the knowledge of that thing as related to something else (and such is the knowledge of God as containing the types of things). Wherefore it is impossible for prophets to see God as containing the types of creatures yet not as the object of heavenly bliss. And since they do not see the divine essence as the object of heavenly bliss (both because vision does away with prophecy (1 Cor. xiii, 9, 10) and because the beatific vision denotes knowledge of God not as distant but as near, since he is seen face to face), it follows that prophets do not see the essence of God as the type of future events, nor do they see things in the Word as the angels did by morning knowledge. For the prophetic vision is not the vision of the very essence of God, nor do they see in the divine essence Itself the things that they do see, as the angels did: but they see them in certain images according as they are enlightened by

the divine light as Dionysius says (Cad. Hier. iv). These images illumined by the divine light have more of the nature of a mirror than the divine essence, inasmuch as in a mirror are formed images from other things, and this cannot be said of God. Yet the prophet's mind thus enlightened may be called a mirror in so far as a likeness of the truth of the divine foreknowledge is reflected therein, and for this reason it is called the mirror of eternity as reflecting by means of those images the fore-knowledge of God who in his eternity sees all things as present before him. Hence the prophet's knowledge bears a greater resemblance to the angel's evening than to his morning knowledge: since the morning knowledge is effected through an uncreated medium, and the prophet's through a created medium, that is by species impressed on him or illumined by the divine light, as stated above.

Reply to the Twenty-eighth Objection. In Augustine's opinion the words, Let the earth bring forth the green herb do not signify that plants were actually produced then in their own nature, but that the earth then received certain forces of production to be brought into action in the work of propagation: so that we may understand that the earth did then bring forth the green herb and the fruit-tree yielding fruit in the sense that then it was made capable of bringing them forth. This is confirmed by the authority of Scripture (Gen. ii, 4, 5) where we read: These are the generations of the heaven and the earth when they were created in the day that the Lord God made the heaven and the earth, and every plant of the field before it sprung up in the earth, and every herb of the ground before it grew. Whence two conclusions are to be inferred. First, that all the works of the six days were created on the day when God made heaven and earth and every plant of the field, so that the plants, which are stated to have been made on the third day were produced at the same time as heaven and earth were created by God. Secondly, that the plants were brought forth then, not into actual existence, but only in certain seed-forms, inasmuch as the earth was enabled to produce them. This is signified when it is stated that God brought forth every plant of the field before it actually sprung up in the earth by the work of administration, and every herb of the ground before it grew. Accordingly before they actually grew above the earth they were produced causally in the earth.

It is also confirmed by the following argument. In those first days God produced the creature in its cause, in its origin, or mi actual existence, by a work from which he rested subsequently, and yet afterwards in the administration of things which he had made, he continues to work even until now in the work of propagation. Now the production of plants from the earth into actual existence belongs to the work of propagation, since the powers of the heavenly body as father, and of the earth as mother suffice for their production. Hence the plants were not actually produced on the third day but only in their causes: and after the six days they were brought into actual existence in their respective

species and natures by the work of government. Consequently before the plants were produced causally, nothing was produced, but they were produced together with the heaven and the earth. In like manner the fishes, birds and animals were produced in those six days causally and not actually.

Reply to the Twenty-ninth Objection. It belongs to the wisdom of an artificer whose works, like God's, are all perfect, to make neither the whole separate from its chief part, nor the parts separate from the whole: since neither the whole separate from the chief part, or the parts separate from the whole have perfect being. Since then the angels in their various species, together with the heavenly bodies and the four elements are the chief parts constituting the one universe, inasmuch as they are mutually ordered to one another and of service the one to the other; it follows that it belongs to God's wisdom to produce the whole universe, together with all its parts at the same time and not by degrees. The reason whereof is that of one whole together with all its parts there should be but one production, and that to produce the one before the other is a mark of weakness in the agent. Now God has infinite power without any weakness, and the universe is his principal effect. Wherefore he created by one single productive act the whole universe together with all its principal parts. And although in the production of the universe no order of time was observed, the order of nature and origin was observed. For according to Augustine the work of creation preceded the work of distinction in the order of nature but not of time; likewise the work of distinction preceded the work of adornment in the order of nature. The work of creation consisted in the making of heaven and earth: and by the heaven we are to understand the production of the spiritual nature in a formless condition: and by the earth, —the formless matter of corporeal beings. These two, as Augustine says (Conf. xii, 8), being outside time, considered in their essence are not subject to the alternations of time: wherefore the creation of both is described as taking place before all days. Not that this formless condition preceded formation by a priority of time, but only in the order of nature and origin, as sound precedes song. Again in his opinion, one formation does not precede another in point of duration, but only in the order of nature. According to this order we must needs give the first place to the formation of the highest spiritual nature, signified in the making of light on the first day, inasmuch as the spiritual nature surpasses the corporeal in dignity and eminence, wherefore it behoved it to be formed first: and it is formed by being enlightened, so as to adhere to the Word of God. Now just as in the natural order spiritual and divine light surpasses the corporeal nature in dignity and eminence, so also do the higher bodies surpass the lower. Hence on the second day mention is made of the formation of the higher bodies, when it is said, Let a firmament be made, whereby it is signified that a heavenly form was bestowed on formless matter which existed already not in point of time but in the order of origin only. The third place is given to the impression of the elemental forms on formless matter, existing already by a priority

not of time but of origin and nature. Hence by the words, Let the waters be gathered together and let the dry land appear, we are to understand that corporeal matter received the substantial form of water so that it was enabled to carry out that movement, as also the substantial form of earth so that it became visible as dry land: because water glides and flows away, whereas the earth abides (Gen. ad lit. ii, ii). Moreover under the name of wker, according to Augustine, we are to understand that the other higher elements also were formed.

In the following three days corporeal nature is stated to have been adorned. It behoved the parts of the world to be first in the order of nature formed and distinguished and afterwards each part to be adorned by being filled with their respective occupants. On the first day, as stated, the spiritual nature was formed and distinguished,; on the second the heavenly bodies were formed and distinguished, and on the fourth adorned; on the third day the lower bodies', namely, air, water and earth were formed and distinguished: of which the air and water as being of greater dignity were adorned on the fifth day; and the earth, being the lowest body, was adorned on the sixth day. Thus the perfection of the divine works corresponds to the perfection of the number six which is the sum and product of its aliquot parts, one, two and three: in that one day was deputed to the formation and distinction of the spiritual creature: two days to the formation and distinction of the corporeal nature, and three to its adornment (thus 1+2+3=6: 6x1=6: 2x3=6 and 3x2=6). Since then six is the first perfect number, it fittingly denotes the perfection of things and of the divine works. Accordingly there is nothing to show that the order of the divine works was one of time and not of nature.

Reply to the Thirtieth Objection. The luminaries were produced in actual and not virtual existence like the plants: thus the firmament has no power productive of luminaries, as the earth has enabling it to bring forth plants. Hence Scripture does not say: Let the firmament produce lights, as it says: Let the earth bring forth the green herb, i.e. let it have the power to produce them. Wherefore the luminaries actually existed before the plants did, although the latter were produced virtually and in their causes before the luminaries were brought into actual existence. Moreover it has been stated that the order of production preceded in the order of nature the work of adornment; and the luminaries belong to the adornment of the heavens, while the plants, especially as regards their virtual existence, do not belong to the adornment of the earth, but rather to its perfection. For seemingly only such things belong to the perfection of the heavens and the earth as are intrinsic to the heavens and earth; while adornment is one of those things that are distinct from them: even so a man is perfected by his proper parts and forms, but is adorned by his clothes or something of the kind. Now things become mutually distinct especially by local movement whereby they are

separated the one from the other.. Hence the work of adornment comprises in a special way the production of those things that are endowed with movement whether in the heavens or on the earth. According to Ptolemy the luminaries are not fixed in the heavens but have a movement independent of that of the spheres, while in the opinion of Aristotle, the stars are fixed to the spheres; and really do not move except with the movement of the spheres: nevertheless the movements of the luminaries and stars is perceptible to the senses whereas that of the spheres is not. Moses coming down to the level of an unlettered people, described things as they appear, by saying that the luminaries are an adornment of the heavens.—Plants are not part of the earth's adornment, only the animals are: because a thing belongs to the adornment of the place wherein it has real or apparent movement, and not where it remains motionless; and the plants cling to the earth by their roots, so that they are not part of its adornment but form part of its perfection. As to the stars although they have no movement of themselves, they have an accidental and apparent movement; while the plants have no movement at all. Consequently in the order of nature it. behoved the plants which belong to the intrinsic perfection of part of the universe to be produced before the luminaries which belong to the adornment of the heavens.

Reply to the Thirty-first Objection. According to Augustine (Super Gen. contra Manich. i, 5, 7) the earth and water mentioned at the beginning before the creation of the firmament do not signify the elements of earth and water, but primal matter devoid of all forms and species. Moses, seeing that he was addressing an unlettered people could not mention primal matter, except under the guise of things known to them and most akin to a formless condition through having more matter and less form. For this reason, he expresses it by combining a twofold comparison, and instead of calling it earth only or water only, he calls it earth and water, lest if he mentioned only one of these, it might be thought that primal matter was really that and nothing else. 'Yet it bears a certain likeness to earth, inasmuch as it supports and underlies forms as the earth supports plants and other things. Again earth of all the elements has the least specification, being more solid and allied to matter, and less formal than the others. It bears also this likeness to water, that it has a natural aptitude for receiving various forms: because humidity which is becoming to water renders things impressionable and easy to fix. Accordingly the earth is said to be void and empty or invisible and incomposite, because matter is known by its form: so that considered in itself, it is said to be invisible, i.e. unknowable, and void inasmuch as the form is the end for which matter craves (because a thing is said to be void when it fails to obtain its end): or it is called void in comparison with the composite wherein it subsists, because a void is opposed to firmness and solidity. It is said to be incomposite, because it cannot subsist outside a composite, and lacks the beauty of actual existence. It is said to be empty because its potentiality is filled by the form: hence Plato

(Tim.) identified matter with place, inasmuch as the receptivity of matter is somewhat like to the receptivity of place, in that while the same matter remains, divers forms succeed one another, just as divers bodies succeed one another in one place. Hence terms that are predicated of place are by comparison predicated of matter, so that matter is said to be empty because it lacks the form which fills the capacity and potentiality of matter. Thus, then, formless primal matter in the order of nature and origin preceded the formation of the firmament, and the latter in the order of nature preceded the earth and water mentioned on the third day, as stated above.

Reply to the Thirty-second Objection. Augustine (De Civ. Dei xi, 33) holds that it was not fitting for Moses to omit the production of the spiritual creature: and so he contends that in the words, In the beginning God created, heaven and earth, heaven signifies the spiritual creature as yet unformed, and earth, formless corporeal matter. And seeing that the spiritual nature is more worthy than the corporeal, it behoved it to receive its formation first. Accordingly the formation of the spiritual nature is signified in the creation of light which denotes spiritual light; because the formation of a spiritual nature consists in its being enlightened so as to adhere to the Word of God, not indeed by perfect glory in which it was not created, but by that which is conferred with the light of grace in which it was created: and this spiritual light preceded the firmament in the order of nature.

But in the opinion of other holy men the light created on the first day was corporeal, and was produced in the heaven created on the first day together with the substance of the sun as regards the common nature of light, while on the fourth day it received definite powers for the production of definite effects.

Reply to the Thirty-third Objection. The order of the production of these animals, since they belong to the adornment of the parts of the universe, depends on the order of the parts they adorn rather than on their own excellence. Now air and water which are adorned by fishes and birds as being more worthy in the order of nature precede the earth which is adorned by the animals that walk on its surface: wherefore it behoved the production of flying creatures and of fishes or swimming creatures to precede that of the creatures that walk.—It might also be said that in the process of generation perfection follows imperfection, and is ordered in such wise that the more imperfect things are produced first in the order of nature: because this process requires that the more perfect a thing is and the greater its likeness to the active cause, the later its production in point of time, although in the order of nature and dignity it takes precedence. For this reason since man is the most perfect of all animals, it behoved him to be made after all the others and not

immediately after the heavenly bodies, which are not reckoned in relation to the lower bodies in the order of generation, since they have no matter in common with them, but one that is altogether disparate.

Reply to the Thirty-fourth Objection. Birds and fishes as regards the matter from which they are produced have more in common with each other than with terrestrial animals. Fishes and birds are said to be produced from the waters: the former from the more solid parts, the latter from the more subtle portion that was resolved into vapour so as to be a mean between air and water: hence the birds arose into the air, while the fishes sank into the deep. Now animals are assigned to various days or to one day according as their bodies are produced from different matters or from the same matter. Since then fishes and birds are said to be produced from the waters inasmuch as, considering their respective temperaments in comparison with the temperament peculiar to the common genus, they have more water in their composition than other animals have, whereas other animals are said to have been produced from the earth, hence it is that one day is assigned to the production of fishes and birds, and another day to the production of the terrestrial animals. Moreover the production of animals is related solely with respect to their being intended for the adornment of parts of the world: wherefore the days on which the animals were produced are distinguished solely with respect to their likeness or difference in the point of adorning some part of the world. As to fire and air seeing that the common people do not regard them as parts of the world, Moses does not mention them expressly but comprises them with the intermediate element namely water, especially as regards the lower parts of the air. Consequently one day is assigned to the birds and fishes which adorn the water and the air as to its lower part which is akin to water: while one other day is assigned to all the terrestrial animals.

If, however, preference be given to the opinion of Gregory and others, the arguments against this view must now be dealt with. These authors hold that between the days in question there was a succession of time, and that things were produced by degrees, so that when heaven and earth were created, there was as yet no light, nor was the firmament formed, nor were the waters removed from the face of the earth, nor the heavenly lights produced.

1. On the day when God created heaven and earth, namely the heavenly bodies and the four elements with their substantial forms, he also created every plant of the field, not actually or before it sprang up from the earth, but potentially so that afterwards on the third day it was produced into actual existence.

- 2. According to Gregory (Moral. xxxii, 9) when God created the angel, he created man also, not actually or in himself, but potentially or in his likeness, in so far as he is like the angels in regard to his intellect. Afterwards on the sixth day man was produced actually in himself.
- 3. The disposition of a thing that is already complete is not the, same as its disposition while yet in the making: wherefore although the nature of a perfect and complete world requires that all the essential parts of the universe exist together, it could be otherwise when the world was as yet in its beginning: thus in a complete man there cannot be a heart without his other parts, yet in the formation of the embryo the heart is fashioned before any other part. It may also be replied that in this beginning of things the heavenly bodies and all the elements with their substantial forms were produced together with the angels, all of which are the principal parts of the universe; and that on the following days, something was done in the nature already created, and pertaining to the perfection and adornment of the parts already produced.
- 4. Although the Greek doctors maintained that the spiritual creature was created before the corporeal, the Latin doctors held that the angels were created at the same time as the corporeal nature, so as to ensure the simultaneous production of the universe in respect of its principle parts. For seeing that corporeal creatures are one in created matter, and that the matter of corporeal creatures was created at the same time as the angels, it may be said that all things were in a sense created at the same time either actually or potentially. Now angels have not matter in common with the corporeal creature: wherefore when the angels were created, corporeal nature would nowise have been created, and consequently neither the universe: and so it is reasonable that they should be created together with the corporeal nature. Accordingly all corporeal things were created at the same time, not actually but in respect of matter in some way formless; and afterwards by degrees they were brought into actual existence by the distinction and adornment of the already existing creature.
- 5. Even as a creature has not being of itself so neither has it perfection otherwise than from God: so in order to indicate that the creature has being from God and not of itself, it was his will that it should come into existence after non-existence: and in order to indicate that the creature has not perfection of itself, it was God's will that it should be at first imperfect, and afterwards by degrees be perfected by the work of distinction and adornment. It may also be replied that it behoved the creation of things to show forth not only the might of

God's power but also the order of his wisdom, so that things having precedence in nature have priority of production: wherefore it was not due to inability on the part of God as though he needed time for his works, that all things were not produced, distinguished and adorned at the same time, the reason of all this being that the order of wisdom might be observed in the production of things. Hence it was fitting that different days should be assigned to the different states of the world. After the work of creation the following work in every case added a new state of perfection to the world: wherefore in order to indicate this perfection and newness of state, it was God's will that one day should correspond to each distinction and adornment, and not because he was weak or tired.

6. The light which, we are told, was made on the first day was the light of the sun, according to Gregory and Dionysius, which, together with the substance of the luminaries, which is the subject of that light, was produced on the first day as regards the common nature of light. On the fourth day, the luminaries were endowed with a definite power for the production of definite effects: thu's we observe that the rays of the sun have a different effect from those of the moon, and so forth. For this reason Dionysius (Div. Nom. iv) says that this light was the light of the sun, but as yet formless as regards that which was the sun's substance, and was endowed with an illuminating power in a general way: and that afterwards it was formed on the fourth day, not indeed with a substantial form, since it has that on the first day, but as regards certain accidental additions by receiving definite powers for the production of definite effects. Accordingly when this light was produced, the light was divided from the darkness in a triple respect. First in respect of its cause, since the cause of light was the sun's substance, while the cause of darkness was the opaqueness of the earth. Secondly in respect of place, since there was light in one hemisphere and darkness in the other. Thirdly, in respect of time, since in the one hemisphere there was light at one time, and darkness at another. This is indicated in the words of Genesis i, 5, He called the light day and the darkness night. Hence that light neither covered the earth on all sides, since in one hemisphere there was light, and darkness in the other: nor was there always light on one side and darkness on the other, but in the same hemisphere there was day at one time and darkness at another.

7. The heaven has a twofold movement. One is the diurnal movement which is common to the whole heaven and causes day and night. This movement would seem to have been produced on the first day, when the formless substance of the sun and other luminaries was produced. The other is its own peculiar movement, which differs in the various heavenly bodies, whose movements bring about the differences of days, months and years. On the first day was produced the common division of time into day and night by the diurnal movement which is common to the whole heaven, and may be said to have begun

on the first day. Wherefore on the first day mention is made only of the distinction of day and night produced by the diurnal movement common to all the heavens. On the fourth day was made the distinction as regards the difference of days and seasons, in that one day is warmer than another, one season warmer than another, and one year warmer than another: all of which result from the special and proper movements of the stars, which movements may be understood to have commenced on the fourth day. Hence it is that on the fourth day mention is made (ibid. 14) of the difference between days, seasons and years: And let them be for seasons and for days and for years: and this difference results from their respective movements. Accordingly those first three days that preceded the formation of the luminaries were of the same kind as the days that are now regulated by the sun as regards the common division of time into day and night resulting from the diurnal movement common to the whole heaven, but not as regards the special differences of days resulting from those proper movements.

- 8. Some say that the light stated to be created on the first day was a luminous cloud, which subsequently when the sun was made, was resolved into the surrounding matter. But this is not likely, seeing that in the beginning of Genesis Scripture relates the establishment of nature in that condition wherein it was to remain, so that it should not be said that anything was made which after a little while ceased to exist. Hence others say that this luminous cloud still exists but united to the sun in such a manner that it cannot be distinguished from it. But in this case this cloud would be superfluous, whereas nothing in God's works is void of purpose or superfluous. Wherefore yet others say that the body of the sun was formed from this cloud. But this again is inadmissible, if we suppose the solar body not to be composed of the four elements but actually incorruptible: since in that case its matter is not susceptive of different forms. Consequently we have to say with Dionysius (Div. Nom. iv) that this light was the light of the sun, of a formless sun however, in respect of what was already the substance of the sun: and that it had an illuminating power in a general way, and that on the fourth day it received a special definite power for the production of its peculiar and particular effects. And thus day and night resulted 'from the circular movement whereby this light approached and receded. Nor is it unlikely that the substances of the spheres which by their common diurnal movement caused this light to revolve, existed from the very beginning, and that subsequently they received certain powers in the works of distinction and adornment.
- 9. The production of light signifies that the property of,luminosity and transparency which is reducible to the genus of light was then bestowed on all luminous and diaphanous bodies. And since the sun is the principle and source of light, by illuminating both higher and lower bodies, therefore Dionysius by the light in question understands the formless

light of the sun, which by the common diurnal movement divided the day from the night, even as it does now.

10. And thus the tenth argument is solved, since that light was not a cloud in its very substance that afterwards ceased to be. It might however be called a cloud as resembling one in respect of a property, in that as a luminous cloud receives from the sun a light that is less bright than its source, even so in those first three days the substance of the sun had an imperfect and as it were formless light which was afterwards perfected on the fourth day: wherefore the substance of the sun was then luminous, since from the moment in which it was created it had its substantial form: yet the sun is stated to have been formed from it on the fourth day, not in substance, but by the addition of a new power, just as a man from being ignorant of music becomes musical not in substance but in capacity.